

# **PERMESSO DI COSTRUIRE**

## **AMPLIAMENTO DEL COMPARTO AUTODROMO DI MODENA**

**LOCALITA' MARZAGLIA – COMUNE DI MODENA**

Provvedimento Autorizzatorio Unico (PAUR) e Valutazione di Impatto Ambientale (VIA), L.R. n. 4/2018, D.Lgs. 152/06  
Progetto di modifica e ampliamento del comparto "Autodromo di Modena", in località Marzaglia, Comune di Modena (MO)



**COMPARTO: AUTODROMO DI MODENA**

**PROPONENTE: AERAUTODROMO MODENA SPA**

**GRUPPO DI PROGETTAZIONE:**

- ARCHILINEA Srl
- BLUEWORKS – Ing. Yos Zorzi
- GEOGROUP Srl
- PRAXIS AMBIENTE Srl
- STUDIO TECNICO CAPELLARI
- STIEM – Ing. Paolo Scuderi e Ing. Luca Buzzoni
- ATEAM PROGETTI
- STUDIO GECO
- STUDIO TECNICO TADDIA
- Dott. Agr. Giovanni Mondani

## **STR – R07 - RELAZIONE DI CALCOLO**

### **PARTE 3 - U.S. OSPITALITY**

# **P.d.C.4**

**REALIZZAZIONE DI TRIBUNA E VISITOR  
CENTER E REALIZZAZIONE DI POSTI AUTO  
PDC 4 - VIA**



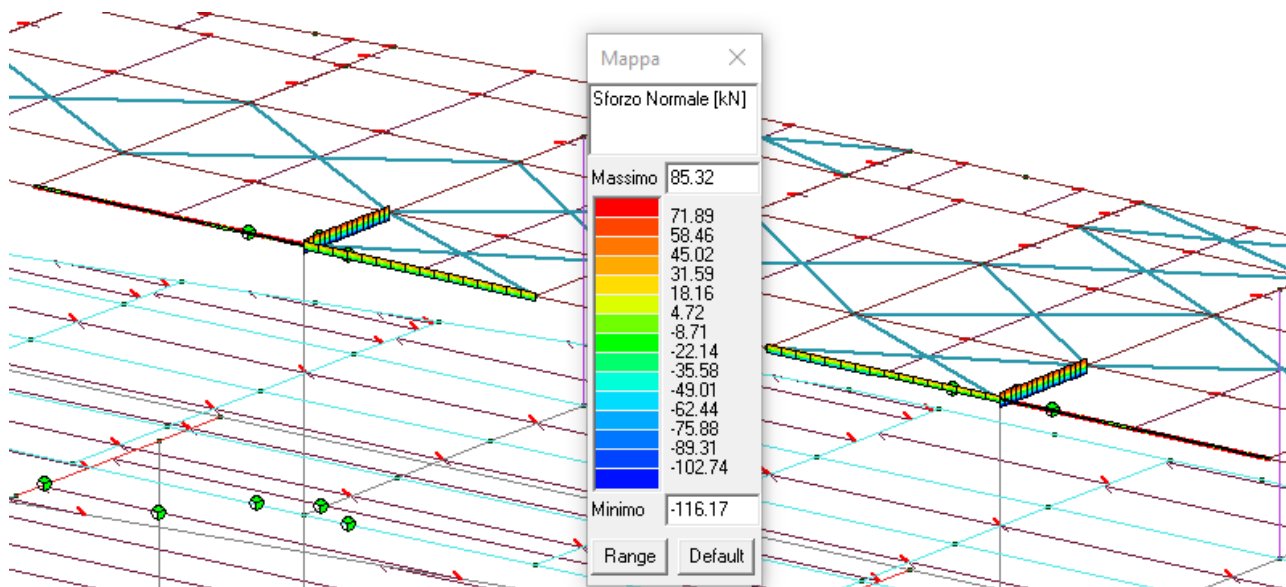
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# RELAZIONE DI CALCOLO COLLEGAMENTI ELEMENTI IN ACCIAIO - COPERTURA

*COLLEGAMENTO TRAVI PRINCIPALI – PILASTRI IN C.A.  
PREFABBRICATI*



## COLLEGAMENTO PILASTRO TRAVE - GIUNTO DI TIPO A

Il collegamento previsto si adotta per strutture calcolate senza gerarchia delle resistenze. Pertanto si confrontano le sollecitazioni puntuali con le resistenze degli elementi di collegamento

caratteristiche spinotto:

$\Phi$   mm  
fyk = 6400 daN/cm<sup>2</sup>  
fyd = 5565 daN/cm<sup>2</sup>  
ftb = 8000 daN/cm<sup>2</sup>  
A netta = 2.45 cm<sup>2</sup>

caratteristiche appoggio

Rck = 50 MPa  
fck = 40 MPa  
 $\gamma/c$  = 1.5  
 $\alpha_{cc}$  = 0.85  
fcd = 23 MPa  
Fctk = 2.46 MPa

### VERIFICA LATO ACCIAIO

Verifica per la direzione lungo l'asse della trave:

Taglio resistente per ciascuna trave per dimensionamento spinotto:

n° spinotti =   
Ved =  kN

Ved singolo spinotto = 37.5 kN < VRd = 86.2 kN (4.2.18) **VERIFICATO**

### VERIFICA LATO CALCESTRUZZO

$V_{ed\parallel} = 150 \text{ kN}$

$V_{ed\perp\text{spinotto}} = 9.375 \text{ kN}$

$V_{\text{risultante}} = 150.29 \text{ kN}$       angolo di inclinazione della risultante =  $3.56^\circ = \text{rad} = 0.062134$

distanza tra la barra e l'asse della staffatura lungo la direzione della trave

$d = 10 \text{ cm}$

copriferro =  $3 \text{ cm}$

$d_u = 7 \text{ cm}$

distanza tra la barra e l'asse della staffatura lungo la direzione ortogonale della trave

$d = 10 \text{ cm}$

copriferro =  $3 \text{ cm}$

$d_u = 7 \text{ cm}$

lato verifica sezione calcestruzzo

$L = 171.07 \text{ cm}$

Infissione della barra nel pilastro (=0.5 infissione effettiva)

$l = 30 \text{ cm}$

$A_{cls} = 5132.1 \text{ cm}^2$       Area Calcestruzzo di verifica

resistenza a trazione del calcestruzzo nella sezione di verifica

$V_{\text{risultante}} = 150.29 \text{ kN} <$

$R_{cls} = 1262.5 \text{ kN}$

**VERIFICATO**

Area staffe cerchiate

passo staffe  $5 \text{ cm}$

n° staffe  $2$   $\text{cm}$

diametro staffe  $10$   $\text{mm}$

Area 1 braccio staffa =  $0.79 \text{ cm}^2$

n° braccia  $4$

$V_{\text{risultante}} = 150.29 \text{ kN} <$

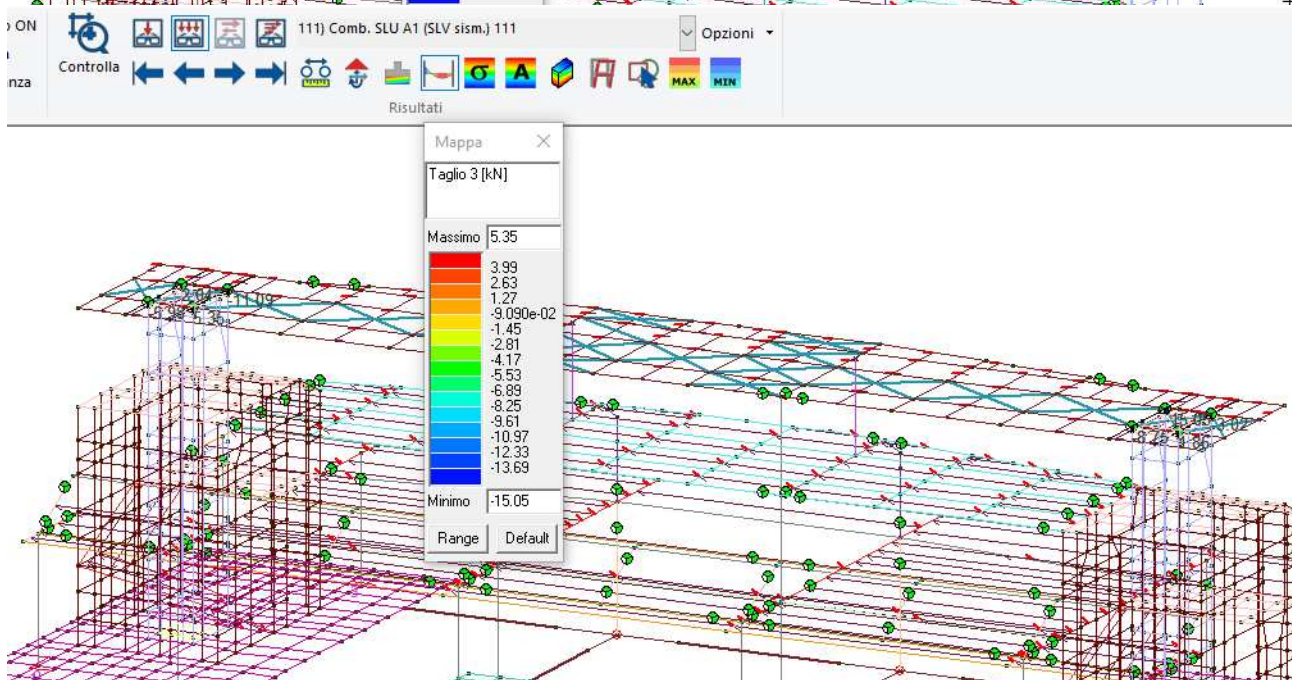
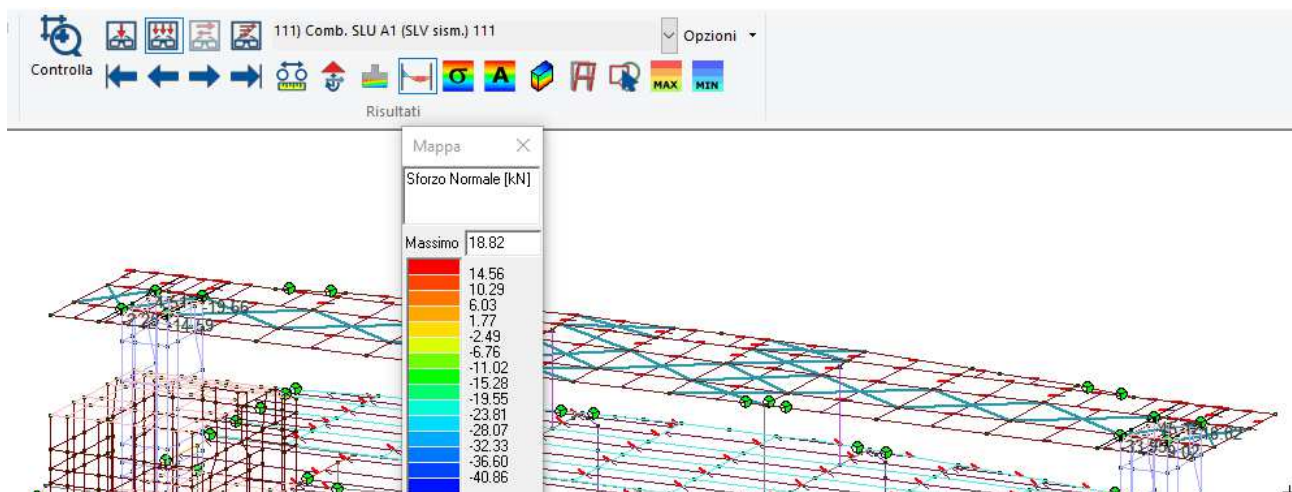
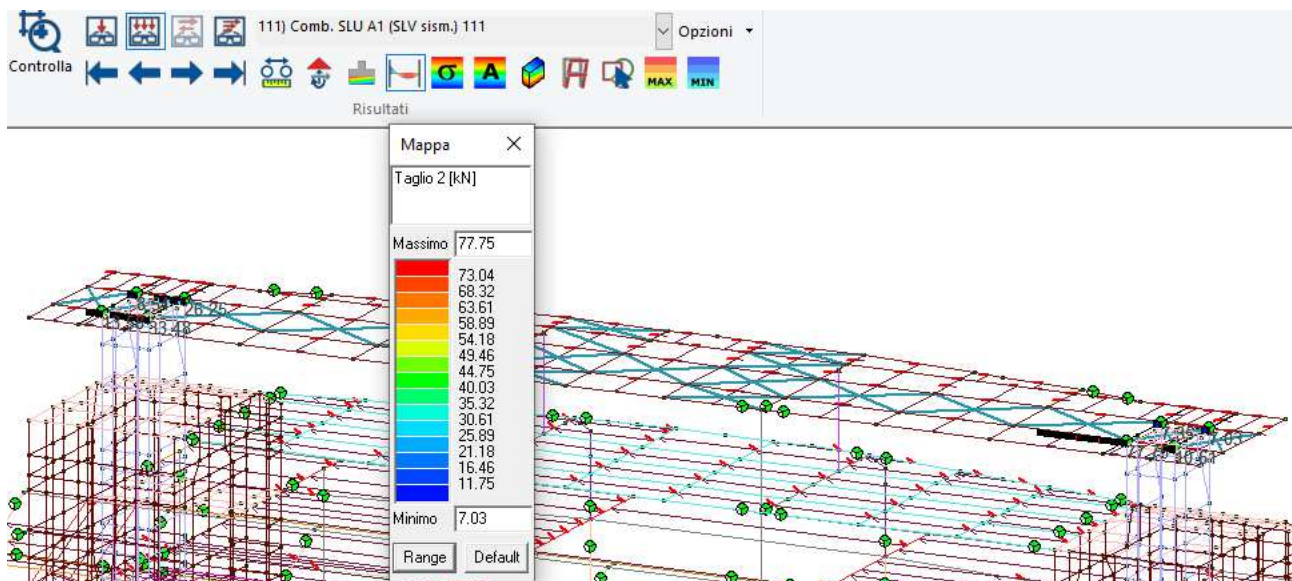
Resistenza acciaio in esercizio staffe =  $228 \text{ kN}$

**VERIFICATO**

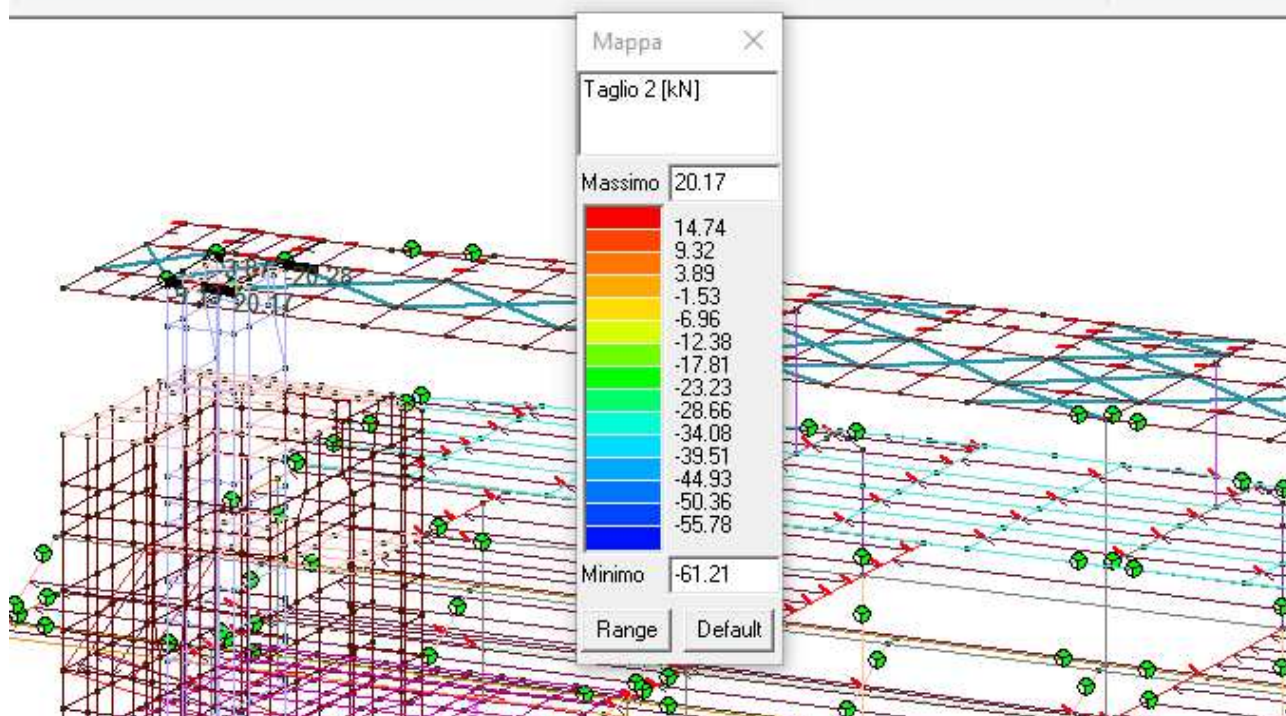
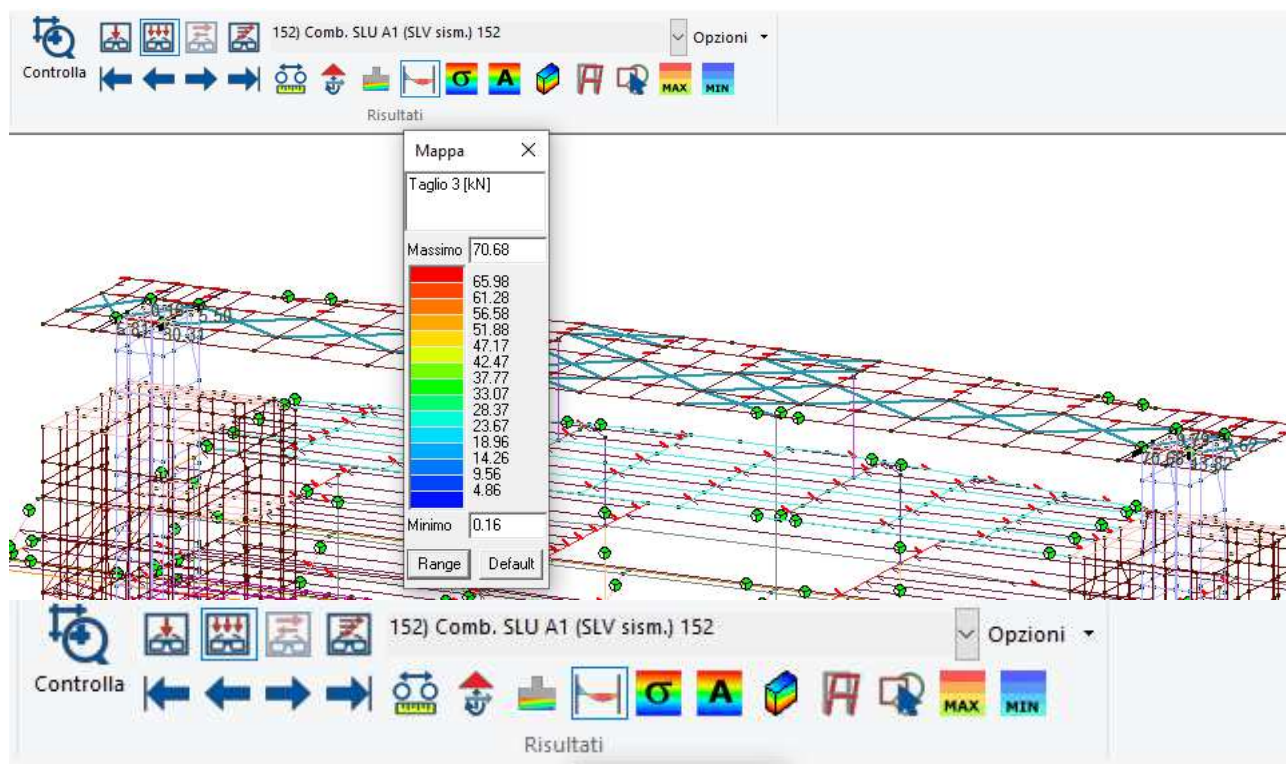
essendo la resistenza del calcestruzzo a trazione per il cuneo attivato dallo spinotto, maggiore al taglio sollecitante, tale azione è equilibrata dall'acciaio della staffatura che reagisce in fase elastica



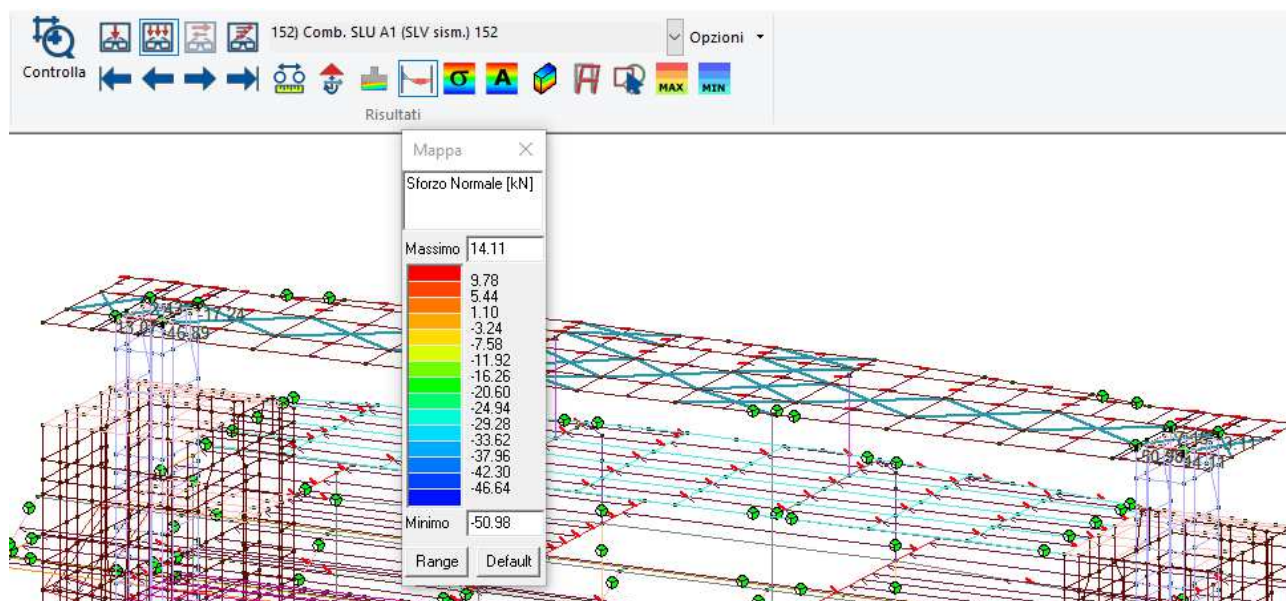
## COLLEGAMENTO TRAVI PRINCIPALI – SETTI IN C.A.











## Basi della progettazione

### Ancorante

Sistema	fischer Sistema a iniezione FIS EM plus
Ancorante chimico ad iniezione	FIS EM Plus 390 S
Elemento di fissaggio	Barra filettata FIS A M 16 x 200 8.8, Acciaio zincato, Classe di resistenza 8.8
Profondità di ancoraggio	150 mm

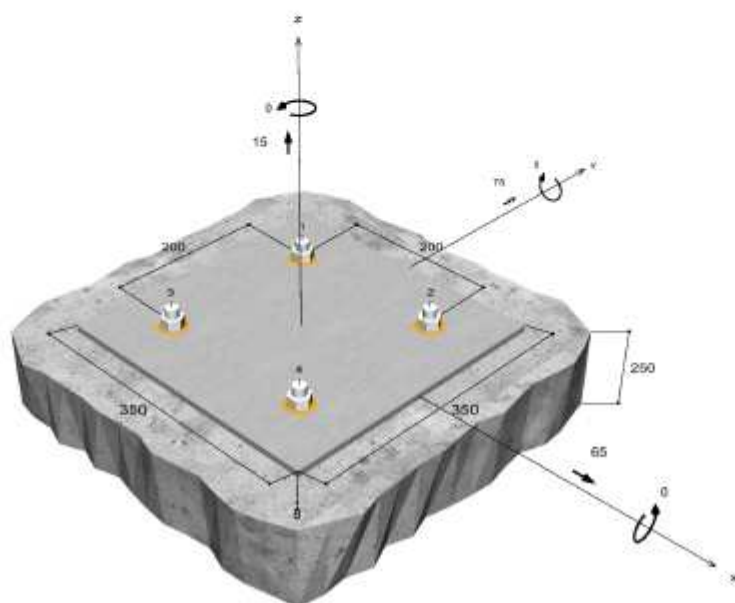
Dati di progetto	Progettazione dell'ancorante in Calcestruzzo secondo Valutazione Tecnica Europea ETA-17/0979, Opzione 1, Emesso 17/06/2020
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### Geometria / Carichi

mm, kN, kNm

Valore di progetto delle azioni (sono inclusi i  
coefficienti parziali di sicurezza delle azioni)



Non in scala

### Dati di input

Metodo di progettazione	Metodo di progettazione EN 1992-4:2017: Ancoranti chimici
Materiale di base	C30/37, EN 206
Condizioni calcestruzzo	Non fessurato, Foro asciutto
Range di temperatura	24 °C Temperatura nel lungo periodo, 40 °C Temperatura nel breve periodo
Armatura	Armatura normale o senza armatura. Senza armatura di bordo
Metodo di foratura	Rotopercussione
Tipo di installazione	Installazione passante
Spazio anulare tra foro della piastra e barra	Spazio anulare tra foro della piastra e barra riempito
Tipo di carico	Statico
Distanziato	Nessuna flessione
Dimensioni piastra di ancoraggio	Ancorante fissato sul materiale di base 350 mm x 350 mm x 8 mm
Tipo di profilo	Nessuno

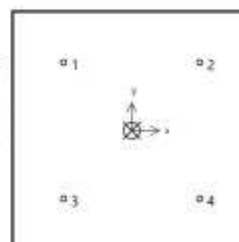
### Carichi di progetto <sup>\*)</sup>

#	N <sub>Ed</sub> kN	V <sub>Ed,x</sub> kN	V <sub>Ed,y</sub> kN	M <sub>Ed,x</sub> kNm	M <sub>Ed,y</sub> kNm	M <sub>T,Ed</sub> kNm	Tipo di carico
1	20.00	20.00	80.00	0.00	0.00	0.00	Statico
2	15.00	65.00	75.00	0.00	0.00	0.00	Statico

<sup>\*)</sup> I coefficienti parziali di sicurezza per le azioni sono inclusi.

### Risultati per le azioni decisive.

Ancorante n°	Forza di trazione kN	Forza di taglio kN	Forza di taglio x kN	Forza di taglio y kN
1	3.75	24.81	16.25	18.75
2	3.75	24.81	16.25	18.75
3	3.75	24.81	16.25	18.75
4	3.75	24.81	16.25	18.75



max. deformazione a compressione del calcestruzzo :	0.00 ‰
max. tensione di compressione del calcestruzzo :	0.0 N/mm <sup>2</sup>
Forza risultante di trazione :	15.00 kN , Coordinate x/y ( 0 / 0 )
Forza risultante di compressione :	0.00 kN , Coordinate x/y ( 0 / 0 )

## Resistenza per l'azione di trazione decisiva.

Verifica	Carico kN	Portata kN	Utilizzo $\beta_N$ %
Rottura dell'acciaio *	3,75	84,00	4,5
Rottura combinata sfilamento e cono di calcestruzzo	15,00	185,42	6,1
Rottura per formazione del cono di calcestruzzo	15,00	153,96	9,7

\* Ancorante più sfavorevole

### Rottura dell'acciaio

$$N_{Ed} \leq \frac{N_{Rk,s}}{\gamma_{Ms}} \quad (N_{Rd,s})$$



$N_{Rk,s}$ kN	$\gamma_{Ms}$	$N_{Rd,s}$ kN	$N_{Ed}$ kN	$\beta_{Ns}$ %
126,00	1,50	84,00	3,75	4,5

Ancorante n°	$\beta_{Ns}$ %	Gruppo n°	Beta decisivo
1	4,5	1	$\beta_{Ns,1}$
2	4,5	2	$\beta_{Ns,2}$
3	4,5	3	$\beta_{Ns,3}$
4	4,5	4	$\beta_{Ns,4}$

### Rottura combinata sfilamento e cono di calcestruzzo

$$N_{Ed} \leq \frac{N_{Rk,p}}{\gamma_{Mp}} \quad (N_{Rd,p})$$



$$N_{Rk,p} = N_{Rk,p}^0 \cdot \frac{A_{p,N}}{A_{p,N}^0} \cdot \Psi_{s,Np} \cdot \Psi_{g,Np} \cdot \Psi_{ec,Np} \cdot \Psi_{re,Np}$$

Equazione  
(7.13)

$$N_{Rk,p} = 133,30 \text{ kN} \cdot \frac{422,500 \text{ mm}^2}{202,500 \text{ mm}^2} \cdot 1,000 \cdot 1,000 \cdot 1,000 \cdot 1,000 = 278,13 \text{ kN}$$

$$N_{Rk,p}^0 = \Psi_{sue} \cdot \pi \cdot d \cdot h_{ef} \cdot \tau_{Rk} = 1,00 \cdot \pi \cdot 16 \text{ mm} \cdot 150 \text{ mm} \cdot 17,7 \text{ N/mm}^2 = 133,30 \text{ kN}$$

Equazione  
(7.14)

$$\Psi_{sue} = 1,00$$

Equazione  
(7.14a)

$$\alpha_{sue} = 0,00 \leq \Psi_{sue}^0 = 0,60$$

$$s_{cr,Np} = \min \left( 7,3 \cdot d \cdot \left( \Psi_{sue} \cdot \tau_{Rk,acr} \right)^{0,5} ; 3 \cdot h_{ef} \right)$$

Equazione  
(7.15)

$$s_{cr,Np} = \min \left( 7,3 \cdot 16 \text{ mm} \cdot \left( 1,00 \cdot 17,0 \text{ N/mm}^2 \right)^{0,5} ; 3 \cdot 150 \text{ mm} \right) = 450 \text{ mm}$$

$$c_{cr,Np} = \frac{s_{cr,Np}}{2} = \frac{450 \text{ mm}}{2} = 225 \text{ mm}$$

Equazione  
(7.16)

$$\Psi_{s,Np} = \min\left(1; 0.7 + 0.3 \cdot \frac{c}{c_{cr,Np}}\right) = \min\left(1; 0.7 + 0.3 \cdot \frac{\infty}{225mm}\right) = 1.000 \leq 1 \quad \text{Equazione (7.20)}$$

$$\Psi_{g,Np} = \max\left(1; \Psi_{g,Np}^0 - \sqrt{\frac{s}{s_{cr,Np}}} \cdot (\Psi_{g,Np}^0 - 1)\right) = 1.000 - \sqrt{\frac{200mm}{450mm}} \cdot (1.000 - 1) = 1.000 \geq 1 \quad \text{Equazione (7.17)}$$

$$\Psi_{g,Np}^0 = \max\left(1; \sqrt{n} - (\sqrt{n} - 1) \cdot \left(\frac{\tau_{Rk}}{\tau_{Rk,c}}\right)^{1.5}\right) \quad \text{Equazione (7.18)}$$

$$\Psi_{g,Np}^0 = \max\left(1; \sqrt{4} - (\sqrt{4} - 1) \cdot \left(\frac{17.7N/mm^2}{14.7N/mm^2}\right)^{1.5}\right) = 1.000 \geq 1$$

$$\tau_{Rk,c} = \frac{k_3}{\pi \cdot d} \sqrt{h_{ef} \cdot f_{ck}} = \frac{11}{3.14 \cdot 16mm} \sqrt{150mm \cdot 30.0N/mm^2} = 14.7N/mm^2 \quad \text{Equazione (7.19)}$$

$$\Psi_{ec,Np} = \frac{1}{1 + \frac{2s_{cr}}{s_{cr,Np}}} = \Psi_{ec,Npx} \cdot \Psi_{ec,Npy} = 1.000 \cdot 1.000 = 1.000 \leq 1 \quad \text{Equazione (7.21)}$$

$$\Psi_{ec,Npx} = \frac{1}{1 + \frac{2 \cdot 0mm}{450mm}} = 1.000 \leq 1 \quad \Psi_{ec,Npy} = \frac{1}{1 + \frac{2 \cdot 0mm}{450mm}} = 1.000 \leq 1$$

$$\Psi_{cr,Np} = 1.000 \quad \text{Equazione (7.5)}$$

$N_{Rk,p}$ kN	$\gamma_{Mp}$	$N_{Ed,p}$ kN	$N_{Ed}$ kN	$\beta_{N,p}$ %
278.13	1.50	185.42	15.00	8.1

Ancorante n°	$\beta_{N,p}$ %	Gruppo n°	Beta decisivo
1, 2, 3, 4	8.1	1	$\beta_{N,p1}$

#### Rottura per formazione del cono di calcestruzzo

$$N_{Ed} \leq \frac{N_{Rk,c}}{\gamma_{Mc}} \quad (N_{Rd,p})$$



$$N_{Rk,c} = N_{Rk,c}^0 \cdot \frac{A_{c,N}}{A_{c,N}^0} \cdot \Psi_{s,N} \cdot \Psi_{ec,N} \cdot \Psi_{ec,N} \cdot \Psi_{ML,N} \quad \text{Equazione (7.1)}$$

$$N_{Rk,c} = 110.69kN \cdot \frac{422,500mm^2}{202,500mm^2} \cdot 1.000 \cdot 1.000 \cdot 1.000 \cdot 1.000 = 230.94kN$$

$$N_{Rk,c}^0 = k_1 \cdot \sqrt{f_{ck}} \cdot h_{ef}^{1.5} = 11.0 \cdot \sqrt{30.0N/mm^2} \cdot (150mm)^{1.5} = 110.69kN \quad \text{Equazione (7.2)}$$

$$\Psi_{s,N} = \min\left(1; 0.7 + 0.3 \cdot \frac{c}{c_{cr,N}}\right) = \min\left(1; 0.7 + 0.3 \cdot \frac{\infty}{225mm}\right) = 1.000 \leq 1 \quad \text{Equazione (7.4)}$$

$$\Psi_{cr,N} = 1.000 \quad \text{Equazione (7.5)}$$

$$\Psi_{ec,N} = \frac{1}{1 + \frac{2s_{cr}}{s_{cr,N}}} \Rightarrow \Psi_{ec,Nx} \cdot \Psi_{ec,Ny} = 1.000 \cdot 1.000 = 1.000 \leq 1 \quad \text{Equazione (7.6)}$$

$$\Psi_{ec,Nx} = \frac{1}{1 + \frac{2 \cdot 0mm}{450mm}} = 1.000 \leq 1 \quad \Psi_{ec,Ny} = \frac{1}{1 + \frac{2 \cdot 0mm}{450mm}} = 1.000 \leq 1$$

$$\Psi_{M,N} = 1.00 \geq 1$$

Equazione  
(7.7)

$N_{Rk,o}$ kN	$\gamma_{Mo}$	$N_{Rd,o}$ kN	$N_{Ed}$ kN	$\beta_{N,o}$ %
230.94	1.50	153.96	15.00	9.7

Ancorante n°	$\beta_{N,o}$ %	Gruppo n°	Beta decisivo
1, 2, 3, 4	9.7	1	$\beta_{N,c1}$

## Resistenza per l'azione di taglio decisiva.

Verifica	Carico kN	Portata kN	Utilizzo $\beta_v$ %
Rottura dell'acciaio senza braccio di leva *	24.81	50.40	49.2
Rottura calcestruzzo sul lato opposto al carico	99.25	307.91	32.2

\* Ancorante più sfavorevole

### Rottura dell'acciaio senza braccio di leva

$$V_{Ed} \leq \frac{V_{Rk,s}}{\gamma_{Ms}} \quad (V_{Rd,s})$$



$$V_{Rk,s} = k_T \cdot V_{Rk,s}^0 = 1.00 \cdot 63.00 \text{ kN} = 63.00 \text{ kN}$$

Equazione  
(7.35)(7.36)

$V_{Rk,s}$ kN	$\gamma_{Ms}$	$V_{Rd,s}$ kN	$V_{Ed}$ kN	$\beta_{Vs}$ %
63.00	1.25	50.40	24.81	49.2

Ancorante n°	$\beta_{Vs}$ %	Gruppo n°	Beta decisivo
1	49.2	1	$\beta_{Vs,1}$
2	49.2	2	$\beta_{Vs,2}$
3	49.2	3	$\beta_{Vs,3}$
4	49.2	4	$\beta_{Vs,4}$

### Rottura calcestruzzo sul lato opposto al carico

$$V_{Ed} \leq \frac{V_{Rk,ep}}{\gamma_{Mc}} \quad (V_{Rd,ep})$$



$$V_{Rk,ep} = k_B \cdot N_{Rk,s} = 2 \cdot 230.94 \text{ kN} = 461.87 \text{ kN}$$

Equazione  
(7.39c)



$$N_{Rk,c} = N_{Rk,c}^0 \cdot \frac{A_{c,N}}{A_{c,N}^0} \cdot \Psi_{s,N} \cdot \Psi_{re,N} \cdot \Psi_{ec,N} \cdot \Psi_{M,N}$$

Equazione (7.1)

$$N_{Rk,c} = 110.69 kN \cdot \frac{422,500 mm^2}{202,500 mm^2} \cdot 1.000 \cdot 1.000 \cdot 1.000 \cdot 1.000 = 230.94 kN$$

$$N_{Rk,c}^0 = k_1 \cdot \sqrt{f_{ck}} \cdot h_{ef}^{1.5} = 11 \cdot \sqrt{30.0 N/mm^2} \cdot (150 mm)^{1.5} = 110.69 kN$$

Equazione (7.2)

$$\Psi_{s,N} = \min\left(1; 0.7 + 0.3 \cdot \frac{e}{e_{cr,N}}\right) = \min\left(1; 0.7 + 0.3 \cdot \frac{\infty}{225 mm}\right) = 1.000 \leq 1$$

Equazione (7.4)

$$\Psi_{re,N} = 1.000$$

Equazione (7.5)

$$\Psi_{ec,N} = \frac{1}{1 + \frac{2e_n}{s_{cr,N}}} \Rightarrow \Psi_{ec,Nx} \cdot \Psi_{ec,Ny} = 1.000 \cdot 1.000 = 1.000 \leq 1$$

Equazione (7.6)

$$\Psi_{M,N} = 1.00 \geq 1$$

Equazione (7.7)

V <sub>Rk,op</sub> kN	V <sub>Mop</sub>	V <sub>Rd,op</sub> kN	V <sub>Ed</sub> kN	β <sub>V,op</sub> %
461.87	1.50	307.91	99.25	32.2

Ancorante n°	β <sub>V,op</sub> %	Gruppo n°	Beta decisivo
1, 2, 3, 4	32.2	1	β <sub>V,op,1</sub>

## Risultati decisivi per le azioni di trazione e taglio.

Carichi di trazione	Utilizzo β <sub>N</sub> %	Carichi di taglio	Utilizzo β <sub>V</sub> %
Rottura dell'acciaio *	4.5	Rottura dell'acciaio senza braccio di leva *	49.2
Rottura combinata sfilamento e cono di calcestruzzo	8.1	Rottura calcestruzzo sul lato opposto al carico	32.2
Rottura per formazione del cono di calcestruzzo	9.7		

\* Ancorante più sfavorevole

## Resistenza per la combinazione di carico decisiva.

<b>Utilizzo dell'acciaio</b> $\beta_{N,s} = \beta_{N,s1} = 0.04 \leq 1$ $\beta_{V,s} = \beta_{V,s1} = 0.49 \leq 1$ $\beta_N^2 + \beta_V^2 = \beta_{N,s1}^2 + \beta_{V,s1}^2 = 0.24 \leq 1$	 <b>Verifica soddisfatta</b>	<b>Utilizzo del calcestruzzo</b> $\beta_{N,c} = \beta_{N,c1} = 0.10 \leq 1$ $\beta_{V,cp} = \beta_{V,cp1} = 0.32 \leq 1$ $\beta_N^{1.5} + \beta_V^{1.5} = \beta_{N,c1}^{1.5} + \beta_{V,cp1}^{1.5} = 0.21 \leq 1$
		<p style="text-align: right;">Equazione (7.55)</p> <p style="text-align: right;">Equazione (7.56)</p>

## Combinazioni di carico non decisive.

#	N <sub>Ed</sub> kN	V <sub>sdx</sub> kN	V <sub>sdy</sub> kN	M <sub>sdx</sub> kNm	M <sub>sdy</sub> kNm	M <sub>T,sd</sub> kNm	Tipo di carico	β <sub>N</sub> %	β <sub>V</sub> %	β %
1	20.00	20.00	60.00	0.00	0.00	0.00	Statico	12.99	40.90	18.54

## Informazioni sulla piastra

### Dettagli piastra di base

Spessore della piastra definito dall'utente senza verifiche

t = 8 mm

## Dati di installazione

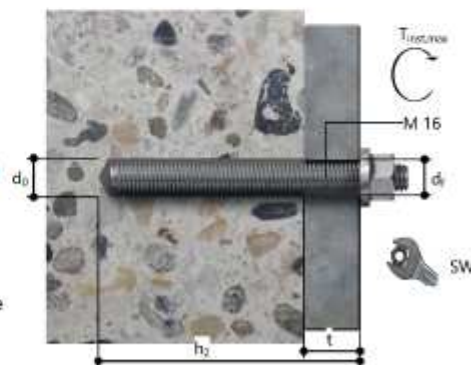
### Ancorante

<b>Sistema</b>	<b>fischer Sistema a iniezione FIS EM plus</b>	
Ancorante chimico ad iniezione	FIS EM Plus 300 S (sono disponibili altri formati della cartuccia)	Articolo 544163
Elemento di fissaggio	Barra filettata FIS A M 16 x 200 8.8, Acciaio zincato, Classe di resistenza 8.8	Articolo 517939
<b>Accessorio</b>	FIS MR Plus	Articolo 545853
	Tubo flessibile da 9mm	Articolo 48983
	Dispenser FIS DM S	Articolo 511118
	Pistola ad aria compressa ABS	Articolo 93286
	Pistola ad aria compressa (p >= 6 bar)	Fornito dal cliente
	BSD 18	Articolo 1493
	Mandrino SDS con filettatura interna M8	Articolo 530332
	Quattric II 18/200/250 o alternativamente	Articolo 549956
	FHD 18/320/450	Articolo 548600
	Foratura a roto-percussione con o senza aspirazione	
<b>Cartucce alternative</b>	FIS EM Plus 585 S	Articolo 544164
	FIS EM Plus 1500 S	Articolo 544167
	Le cartucce mostrate sono alternative a quella evidenziata con lo stesso numero di Benestare/Valutazione.	



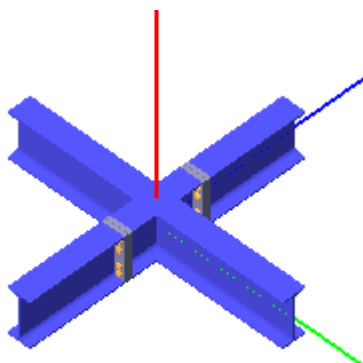
### Dettagli di installazione

Filettatura	M 16
Diametro del foro	$d_0 = 18 \text{ mm}$
Profondità di foratura	$h_2 = 158 \text{ mm}$
Profondità di ancoraggio	$h_{ef} = 150 \text{ mm}$
Metodo di foratura	Rotopercussione
Pulizia del foro	Pulire con 2 soffiati, 2 spazzolate e 2 soffiati eseguite con idonei pistola ad aria compressa e scovolino. Nessuna pulizia del foro richiesta in caso di utilizzo di una punta cava, per es. fischer FHD
Tipo di installazione	Installazione passante
Spazio anulare tra foro della piastra e barra	Spazio anulare tra foro della piastra e barra riempito
Coppia di serraggio massima	$T_{inst,max} = 60.0 \text{ Nm}$
Dimensioni della chiave	24 mm
Spessore della piastra di base	$t = 8 \text{ mm}$
$t_{fix}$	$t_{fix} = 8 \text{ mm}$
$T_{fix,max}$	
Consumo di resina per foro	20 ml/10 Unità graduate



## COLLEGAMENTO TRA IPE 300

Verifica secondo il D.M. 17/01/2018 dei nodi: 108, 195, 196, 198, 200, 251, 252, 253, 254, 257, 266, 267, 272, 274, 276, 354, 357, 372, 374, 488, 518, 580, 593, 963



### Trave 2

Tipo di profilo: IPE 300

Materiale: Acciaio S355  $f_y = 355 \text{ N/mm}^2$   $f_t = 510 \text{ N/mm}^2$   $\gamma_{ov} = 1.25$

Classe sezione: 1

### Coefficienti di sicurezza utilizzati

$\gamma_{M0} = 1.05$

$\gamma_{M1} = 1.10$

$\gamma_{M2} = 1.25$

### Trave lato 3+

Tipo di profilo: IPE 300

Materiale: Acciaio S355  $f_y = 355 \text{ N/mm}^2$   $f_t = 510 \text{ N/mm}^2$   $\gamma_{ov} = 1.25$

Classe sezione: 1

### Flangia:

Materiale: Acciaio S355  $f_y = 355 \text{ N/mm}^2$   $f_t = 510 \text{ N/mm}^2$   $\gamma_{ov} = 1.25$

Dimensioni (B x H x Sp): 150.0 x 300.0 x 25.0 mm

### Bullonature:

Viti cl. 8.8 Dadi 8 o 10 ( $f_{yb} = 640 \text{ N/mm}^2$ ,  $f_{tb} = 800 \text{ N/mm}^2$ )

Diametro gambo  $\varnothing = 20 \text{ mm}$   $A_{res} = 245.0 \text{ mm}^2$  (ridotta per filettatura)

Diametro dado/testa  $d_m = 30 \text{ mm}$

Diametro foro  $\varnothing_0 = 21 \text{ mm}$

### Saldature:

Materiale: Acciaio S355  $f_y = 355 \text{ N/mm}^2$   $f_t = 510 \text{ N/mm}^2$   $\beta_1 = 0.70$   $\beta_2 = 0.85$

Spessore cordoni d'angolo  $s_c = 13 \text{ mm}$

### Sollecitazioni nella sezione d'attacco dell'elemento:

Nodo.CMB	V2 [N]	V3 [N]	N [N]	M2 [N mm]	M3 [N mm]	T [N mm]
108.1	1275.5	24.8	-76.5	55521.0	86365.1	1037.0
108.2	1954.0	34.3	-122.0	68304.0	535023.7	472.0
108.3	1890.9	44.3	-65.9	106077.0	1189697.0	2813.0
108.4	2569.4	55.8	-105.2	120891.0	1638373.0	2248.0
108.5	979.9	19.0	-58.7	42612.0	64435.6	796.0
108.6	1658.4	28.3	-104.3	55090.0	513100.3	231.0
108.7	1595.3	38.8	-47.6	93360.0	1167771.0	2572.0
108.8	2273.8	49.9	-86.7	107770.0	1616522.0	2007.0
108.9	2632.6	42.6	-164.0	79692.0	983765.8	-93.0
108.10	1706.3	38.5	-69.3	90908.0	858685.4	2280.0

108.11	3063.4	57.7	-150.7	116523.0	1756139.0	1150.0
108.12	2337.0	36.6	-144.1	66468.0	961850.4	-333.0
108.13	1410.7	32.8	-51.0	78129.0	836760.9	2039.0
108.14	2767.8	51.5	-130.6	103190.0	1733776.0	910.0
108.15	2384.8	49.1	-110.0	104791.0	1307370.0	1715.0
108.16	2089.2	43.3	-91.9	91863.0	1285457.0	1474.0
108.17	970.7	19.6	-55.2	48841.0	-115489.0	1293.0
108.18	1649.2	30.5	-100.6	63153.0	333133.7	728.0
108.19	1586.0	39.4	-46.2	99660.0	987792.3	3068.0
108.20	2264.6	51.3	-86.6	114987.0	1436477.0	2504.0
108.21	675.0	13.9	-36.7	36071.0	-137445.7	1052.0
108.22	1353.6	24.5	-83.1	49956.0	311208.3	487.0
108.23	1290.4	33.5	-26.9	86578.0	965872.9	2828.0
108.24	1969.0	45.7	-67.7	102218.0	1414555.0	2263.0
108.25	2327.7	38.8	-145.0	74557.0	781832.3	163.0
108.26	1401.4	33.1	-50.2	84082.0	656786.9	2536.0
108.27	2758.5	54.0	-132.0	111436.0	1554200.0	1406.0
108.28	2032.1	32.9	-126.6	61427.0	759915.9	-78.0
108.29	1105.8	27.8	-32.2	71577.0	634859.6	2295.0
108.30	2462.9	48.0	-113.0	98262.0	1532288.0	1165.0
108.31	767.4	16.5	-40.0	44742.0	-250089.8	1464.0
108.32	1445.9	27.9	-86.3	59606.0	198520.9	899.0
108.33	1198.2	30.0	-37.7	79970.0	522198.6	2706.0
108.34	1876.7	41.6	-78.1	94973.0	970855.3	2142.0
108.35	471.8	10.3	-21.2	31454.0	-272017.1	1223.0
108.36	1150.3	22.0	-68.7	46523.0	176593.6	658.0
108.37	902.6	24.8	-19.8	67685.0	500269.3	2466.0
108.38	1581.1	36.1	-60.4	82316.0	948932.9	1901.0
108.39	2079.9	44.8	-90.5	99127.0	1105448.0	1971.0
108.40	1784.3	39.4	-72.5	86565.0	1083521.0	1730.0
108.41	1397.5	26.7	-84.7	58090.0	167131.1	935.0
108.42	2076.0	35.8	-130.3	70349.0	615801.8	370.0
108.43	2012.8	46.8	-73.5	109107.0	1270440.0	2710.0
108.44	2691.4	57.4	-112.9	122972.0	1719405.0	2145.0
108.45	1101.8	20.9	-66.9	45118.0	145175.4	694.0
108.46	1780.4	29.7	-112.4	57082.0	593879.4	129.0
108.47	1717.2	40.8	-55.0	96015.0	1248520.0	2469.0
108.48	2395.8	51.4	-94.2	109801.0	1697455.0	1905.0
108.49	2754.6	44.0	-171.0	81618.0	1064546.0	-195.0
108.50	1828.2	40.5	-76.9	93538.0	939431.1	2177.0
108.51	3185.4	59.2	-157.8	118521.0	1836658.0	1048.0
108.52	2458.9	38.1	-151.3	68543.0	1042607.0	-436.0
108.53	1532.6	34.9	-59.3	80814.0	917508.7	1937.0
108.54	2889.8	53.0	-137.5	105196.0	1814709.0	807.0
108.55	2506.8	50.6	-117.8	106876.0	1388156.0	1613.0
108.56	2211.2	44.8	-99.5	93934.0	1366244.0	1372.0
108.57	1478.7	28.0	-90.1	59781.0	220941.4	866.0
108.58	2157.3	36.7	-135.7	71653.0	669646.4	302.0
108.59	1909.5	41.8	-81.9	95188.0	993272.8	2109.0
108.60	2588.1	51.7	-123.0	108274.0	1442006.0	1545.0
108.61	1183.1	22.2	-72.3	46779.0	199012.0	626.0
108.62	1861.7	30.5	-117.5	58286.0	647726.0	61.0
108.63	1613.9	36.3	-64.4	82594.0	971349.3	1868.0
108.64	2292.5	45.8	-104.5	95307.0	1420091.0	1304.0
108.108	963.3	-2587.0	-965.8	-2680000.0	152828.7	-2839.0
108.109	1360.6	-2489.8	-1515.2	-2577000.0	845057.1	-1210.0
108.110	1736.0	-1648.1	-3515.3	-1731000.0	1568163.0	-740.0
108.111	2133.0	-1545.8	-4153.0	-1620000.0	2259822.0	890.0
108.112	328.4	1058.6	3048.2	1157000.0	-1230734.0	2149.0
108.113	726.4	1115.2	2243.0	1217000.0	-537213.3	3780.0

108.114	1107.3	1304.0	-589.4	1389000.0	195274.9	4267.0
108.115	1503.8	1352.7	-1717.0	1437000.0	886368.4	5895.0
108.116	873.6	-2535.8	-556.8	-2630000.0	-1211.7	-3013.0
108.117	1270.8	-2436.9	-1089.2	-2526000.0	691094.3	-1385.0
108.118	1828.9	-1726.4	-4042.0	-1810000.0	1726718.0	-559.0
108.119	2225.9	-1622.9	-4673.7	-1698000.0	2419377.0	1071.0
108.120	238.8	1106.0	3424.1	1203000.0	-1384452.0	1976.0
108.121	635.9	1162.8	2567.8	1262000.0	-692481.6	3604.0
108.122	1197.0	1257.3	-1049.8	1343000.0	348562.3	4442.0
108.123	1593.3	1309.3	-2188.3	1395000.0	1039320.0	6070.0
108.124	954.3	-5054.5	-3341.4	-5246000.0	-896037.2	-2722.0
108.125	1351.0	-4954.7	-3891.3	-5140000.0	-204270.9	-1095.0
108.126	1724.6	-4176.1	-5993.6	-4352000.0	515799.4	-630.0
108.127	2121.6	-4068.6	-6609.2	-4237000.0	1207843.0	999.0
108.128	351.8	2521.8	3688.2	2651000.0	-157156.1	2075.0
108.129	748.5	2568.8	2589.4	2697000.0	534396.1	3702.0
108.130	1130.0	2806.0	-216.6	2916000.0	1268102.0	4190.0
108.131	1526.4	2853.0	-1327.2	2962000.0	1959019.0	5818.0
108.132	862.0	-4993.9	-2901.5	-5187000.0	-1053440.0	-2904.0
108.133	1259.2	-4894.9	-3454.4	-5082000.0	-361160.8	-1276.0
108.134	1817.3	-4251.6	-6504.1	-4429000.0	674697.4	-448.0
108.135	2214.4	-4143.9	-7118.8	-4312000.0	1366561.0	1181.0
108.136	260.7	2571.5	4089.9	2698000.0	-312586.5	1895.0
108.137	657.4	2621.0	2990.8	2747000.0	378757.8	3523.0
108.138	1220.0	2756.7	-649.3	2868000.0	1422331.0	4365.0
108.139	1616.5	2806.0	-1782.6	2917000.0	2112864.0	5994.0
108.140	-161.9	-2084.4	3771.0	-2109000.0	-1985050.0	-3542.0
108.141	235.0	-1953.8	3215.0	-1970000.0	-1293416.0	-1915.0
108.142	2423.6	125.9	-6246.7	100136.0	2751504.0	3475.0
108.143	2820.2	162.5	-7388.8	137048.0	3443062.0	5104.0
108.144	-355.2	-823.3	5384.8	-783243.0	-2404061.0	-2056.0
108.145	41.6	-691.8	4828.7	-643439.0	-1712452.0	-428.0
108.146	2235.8	827.6	-5777.1	841979.0	2340887.0	4981.0
108.147	2632.4	864.0	-6919.4	878799.0	3032445.0	6610.0
108.148	-165.2	-2832.2	3061.0	-2886000.0	-2300887.0	-3508.0
108.149	232.0	-2737.4	2502.9	-2786000.0	-1608176.0	-1879.0
108.150	2416.6	-319.0	-6357.9	-354521.0	2429729.0	3497.0
108.151	2813.5	-284.9	-7485.1	-320104.0	3121363.0	5127.0
108.152	-351.3	-97.1	6192.2	-30450.0	-2088072.0	-2088.0
108.153	45.2	35.8	5614.0	110647.0	-1396540.0	-461.0
108.154	2242.0	1282.8	-5711.6	1307000.0	2662459.0	4957.0
108.155	2638.7	1324.7	-6863.4	1350000.0	3353042.0	6586.0
108.156	-459.6	-1896.8	5227.2	-1923000.0	-2496532.0	-4116.0
108.157	-63.2	-1763.0	4639.8	-1781000.0	-1806024.0	-2490.0
108.158	2730.7	-41.3	-7806.6	-63423.0	3275369.0	4081.0
108.159	3127.6	-7.9	-8928.3	-29755.0	3968003.0	5711.0
108.160	-653.3	-622.0	6837.6	-583247.0	-2916644.0	-2631.0
108.161	-256.9	-488.2	6250.2	-441327.0	-2226137.0	-1005.0
108.162	2542.7	653.7	-7359.1	671114.0	2864702.0	5586.0
108.163	2939.6	687.0	-8480.8	704772.0	3556336.0	7216.0
108.164	-462.4	-2669.0	4515.2	-2727000.0	-2811242.0	-4081.0
108.165	-65.7	-2569.6	3925.7	-2621000.0	-2119658.0	-2453.0
108.166	2724.4	-487.0	-7866.6	-518357.0	2954772.0	4105.0
108.167	3121.4	-453.5	-8988.3	-484634.0	3646431.0	5735.0
108.168	-650.5	118.9	7592.3	184487.0	-2600935.0	-2667.0
108.169	-254.1	252.6	7005.0	326408.0	-1910427.0	-1041.0
108.170	2549.9	1092.2	-7236.2	1119000.0	3187527.0	5565.0
108.171	2946.5	1129.5	-8378.6	1157000.0	3878085.0	7194.0
108.268	275.1	-1201.3	1436.8	-1217000.0	-1144249.0	-3000.0
108.269	1598.7	-883.7	-415.9	-880751.0	1162728.0	2429.0



108.270	1049.0	-329.9	-611.0	-333356.0	273922.9	-902.0
108.271	2371.4	-123.2	-4116.3	-119335.0	2578269.0	4529.0
108.272	83.0	28.1	3056.0	76747.0	-1561955.0	-1509.0
108.273	1407.4	353.7	881.0	423041.0	746305.3	3921.0
108.274	861.2	447.3	117.8	488569.0	-136694.7	604.0
108.275	2184.2	621.7	-3785.8	668648.0	2168804.0	6035.0
108.276	186.2	-1154.6	1893.1	-1171000.0	-1296789.0	-3171.0
108.277	1509.3	-829.4	-8.5	-827748.1	1009278.0	2255.0
108.278	1141.6	-409.6	-1121.9	-413714.0	431978.7	-718.0
108.279	2463.8	-171.1	-4501.1	-165261.0	2736697.0	4710.0
108.280	-6.7	92.8	3477.2	141186.0	-1715699.0	-1682.0
108.281	1316.9	402.0	1247.6	469913.0	590992.0	3745.0
108.282	953.4	393.3	-346.0	435660.0	20712.6	786.0
108.283	2275.0	566.3	-4233.9	614305.0	2323826.0	6214.0
108.284	271.6	-1939.2	734.9	-1985000.0	-1460136.0	-2967.0
108.285	1595.5	-1621.7	-1119.6	-1648000.0	847343.1	2462.0
108.286	1045.1	-1067.6	-1367.1	-1100000.0	-42738.9	-869.0
108.287	2367.0	-742.0	-4411.7	-756285.0	2261153.0	4559.0
108.288	88.0	594.0	3479.2	658935.0	-1242688.0	-1538.0
108.289	1413.5	790.1	1001.7	867423.1	1066895.0	3896.0
108.290	867.9	887.9	228.5	936879.0	185082.0	581.0
108.291	2190.9	1074.0	-3688.1	1129000.0	2490503.0	6012.0
108.292	181.9	-1889.0	1135.9	-1936000.0	-1613879.0	-3140.0
108.293	1505.9	-1569.1	-703.3	-1597000.0	693661.9	2289.0
108.294	1137.4	-1147.1	-2004.4	-1181000.0	114975.8	-687.0
108.295	2459.4	-818.8	-4782.3	-832340.1	2418581.0	4741.0
108.296	-1.6	640.5	3866.1	704049.0	-1397406.0	-1711.0
108.297	1323.4	837.9	1359.0	913572.0	912227.1	3721.0
108.298	959.8	832.0	-229.4	881567.0	341839.3	762.0
108.299	2281.3	1026.0	-4144.9	1082000.0	2645424.0	6189.0
195.1	4426.0	221.5	10.4	-193063.0	-6283788.0	13695.0
195.2	6647.9	237.0	13.9	-204125.0	-9934425.0	22481.0
195.3	4792.4	365.8	18.0	-314636.0	-6882887.0	18306.0
195.4	7014.2	381.0	21.5	-325623.0	-10531550.0	27091.0
195.5	3403.3	172.0	7.9	-150069.0	-4831094.0	10531.0
195.6	5625.1	187.4	11.4	-161125.0	-8483756.0	19317.0
195.7	3769.6	316.2	15.6	-271655.0	-5430218.0	15142.0
195.8	5991.5	331.5	19.0	-282626.0	-9080855.0	23927.0
195.9	8869.8	252.4	17.3	-215166.0	-13591060.0	31267.0
195.10	4682.5	322.5	15.8	-278182.0	-6702753.0	16922.0
195.11	9126.2	353.2	22.7	-300134.0	-14006050.0	34494.0
195.12	7847.0	202.8	14.8	-172152.0	-12140390.0	28103.0
195.13	3659.7	272.9	13.3	-235190.0	-5250083.0	13759.0
195.14	8103.5	303.5	20.2	-257076.0	-12555360.0	31330.0
195.15	6904.3	337.8	19.2	-289171.0	-10359420.0	25708.0
195.16	5881.6	288.2	16.8	-246177.0	-8898720.0	22544.0
195.17	3426.4	213.9	8.9	-187395.0	-4640237.0	9745.0
195.18	5648.3	229.4	12.3	-198503.0	-8291874.0	18530.0
195.19	3792.7	358.2	16.5	-309015.0	-5239361.0	14355.0
195.20	6014.6	373.5	20.0	-320037.0	-8894998.0	23141.0
195.21	2403.6	164.4	6.4	-144394.0	-3187567.0	6581.0
195.22	4625.5	179.8	9.8	-155511.0	-6840205.0	15367.0
195.23	2770.0	308.6	14.0	-266049.0	-3786667.0	11191.0
195.24	4991.9	323.9	17.5	-277037.0	-7439304.0	19977.0
195.25	7870.1	244.8	15.8	-209532.0	-11944540.0	27316.0
195.26	3682.8	315.0	14.2	-272570.0	-5059226.0	12972.0
195.27	8126.6	345.6	21.1	-294549.0	-12359500.0	30543.0
195.28	6847.4	195.2	13.3	-166534.0	-10493840.0	24152.0
195.29	2660.1	265.4	11.7	-229588.0	-3607532.0	9808.0
195.30	7103.8	296.0	18.7	-251526.0	-10908830.0	27380.0

195.31	2760.0	208.8	7.8	-183600.0	-3544202.0	7111.0
195.32	4981.8	224.3	11.3	-194755.0	-7196865.0	15897.0
195.33	3016.4	309.9	13.1	-268839.0	-3964192.0	10338.0
195.34	5238.3	325.2	16.6	-279849.0	-7616829.0	19124.0
195.35	1737.2	159.2	5.3	-140568.0	-2092533.0	3947.0
195.36	3959.1	174.7	8.8	-151763.0	-5745171.0	12733.0
195.37	1993.7	260.4	10.7	-225863.0	-2511498.0	7175.0
195.38	4215.5	275.7	14.2	-236871.0	-6164160.0	15960.0
195.39	5904.7	330.3	17.7	-283579.0	-8712863.0	21758.0
195.40	4882.0	280.7	15.2	-240588.0	-7259169.0	18594.0
195.41	4825.9	224.6	11.0	-195322.0	-6940393.0	15275.0
195.42	7047.7	240.0	14.5	-206369.0	-10593060.0	24061.0
195.43	5192.2	368.8	18.7	-316891.0	-7539518.0	19886.0
195.44	7414.1	384.1	22.2	-327861.0	-11190160.0	28671.0
195.45	3803.1	175.0	8.6	-152326.0	-5488724.0	12111.0
195.46	6025.0	190.4	12.0	-163362.0	-9142361.0	20897.0
195.47	4169.5	319.2	16.2	-273894.0	-6087824.0	16722.0
195.48	6391.3	334.5	19.7	-284848.0	-9739486.0	25508.0
195.49	9269.6	255.4	18.0	-217399.0	-14249690.0	32847.0
195.50	5082.3	325.5	16.4	-280426.0	-7360383.0	18503.0
195.51	9526.1	356.2	23.3	-302358.0	-14664660.0	36074.0
195.52	8246.9	205.8	15.5	-174394.0	-12789000.0	29683.0
195.53	4059.6	276.0	13.9	-237445.0	-5907689.0	15339.0
195.54	8503.3	306.6	20.8	-259315.0	-13213990.0	32910.0
195.55	7304.2	340.8	19.9	-291409.0	-11008020.0	27288.0
195.56	6281.4	291.3	17.4	-248409.0	-9557351.0	24124.0
195.57	5092.5	226.6	11.5	-196825.0	-7378797.0	16329.0
195.58	7314.3	242.0	14.9	-207864.0	-11035460.0	25114.0
195.59	5348.9	327.5	16.8	-281919.0	-7797787.0	19556.0
195.60	7570.8	342.9	20.3	-292902.0	-11450420.0	28342.0
195.61	4069.7	177.0	9.0	-153829.0	-5926128.0	13165.0
195.62	6291.6	192.4	12.4	-164856.0	-9574765.0	21951.0
195.63	4326.2	278.0	14.3	-238942.0	-6346092.0	16392.0
195.64	6548.0	293.3	17.8	-249895.0	-9999755.0	25178.0
195.108	1995.7	339.2	-1390.5	-329178.0	-2517990.0	5628.0
195.109	2562.8	525.0	-927.8	-495434.0	-3449202.0	6941.0
195.110	2590.3	1329.2	199.4	-1230000.0	-3494229.0	7806.0
195.111	3157.1	1529.8	666.6	-1411000.0	-4424517.0	9118.0
195.112	3941.1	-1125.9	-596.7	1073000.0	-5714734.0	15625.0
195.113	4508.3	-931.0	-153.9	900258.0	-6645921.0	16938.0
195.114	4537.0	-2.8	937.8	70702.0	-6692644.0	17804.0
195.115	5103.6	196.8	1404.6	-108542.0	-7622982.0	19115.0
195.116	1943.2	-181.8	-2598.6	148695.0	-2432302.0	5434.0
195.117	2510.3	5.1	-2135.5	-18694.0	-3363513.0	6746.0
195.118	2642.7	1877.8	1415.4	-1736000.0	-3579943.0	8000.0
195.119	3209.4	2077.2	1882.4	-1916000.0	-4510257.0	9311.0
195.120	3888.6	-1649.2	-1806.8	1553000.0	-5629046.0	15431.0
195.121	4455.7	-1463.8	-1342.7	1388000.0	-6559257.0	16743.0
195.122	4589.3	601.7	2159.5	-487565.0	-6777383.0	17998.0
195.123	5156.1	799.4	2626.0	-665173.0	-7708671.0	19310.0
195.124	2017.3	38.6	-2374.9	-11122.0	-2553514.0	5658.0
195.125	2584.5	226.9	-1911.4	-179621.0	-3484700.0	6971.0
195.126	2612.2	1038.7	-819.2	-918200.0	-3529677.0	7838.0
195.127	3178.9	1237.9	-351.9	-1098000.0	-4459990.0	9149.0
195.128	3919.9	-848.0	357.2	799790.0	-5680110.0	15590.0
195.129	4486.7	-649.0	823.2	621335.0	-6610397.0	16902.0
195.130	4515.1	271.7	1950.0	-204720.0	-6656196.0	17767.0
195.131	5081.7	472.0	2416.8	-384672.0	-7586535.0	19079.0
195.132	1964.8	-447.2	-3577.9	434446.0	-2467825.0	5464.0
195.133	2531.7	-263.5	-3115.5	270357.0	-3399088.0	6776.0

195.134	2664.4	1584.9	395.9	-1422000.0	-3615442.0	8030.0
195.135	3231.0	1783.8	862.9	-1602000.0	-4545780.0	9342.0
195.136	3867.0	-1390.0	-820.2	1296000.0	-5593523.0	15395.0
195.137	4434.1	-1205.0	-359.1	1132000.0	-6523734.0	16708.0
195.138	4568.1	839.8	3167.8	-729757.0	-6742759.0	17963.0
195.139	5134.8	1039.4	3634.4	-909068.0	-7673072.0	19275.0
195.140	1977.9	-1425.4	-2976.5	1286000.0	-2490504.0	6573.0
195.141	2545.0	-1240.1	-2513.7	1119000.0	-3421715.0	7886.0
195.142	3961.3	2121.4	2311.7	-1910000.0	-5744613.0	13834.0
195.143	4528.0	2323.2	2778.5	-2091000.0	-6675926.0	15146.0
195.144	2561.1	-1875.6	-2752.4	1711000.0	-3448633.0	9572.0
195.145	3128.2	-1690.2	-2289.6	1545000.0	-4379845.0	10885.0
195.146	4545.5	1740.9	2534.1	-1533000.0	-6704489.0	16833.0
195.147	5112.3	1941.5	3000.8	-1713000.0	-7635777.0	18145.0
195.148	1984.4	-1504.1	-3270.4	1371000.0	-2500856.0	6582.0
195.149	2551.6	-1319.2	-2807.8	1205000.0	-3432042.0	7895.0
195.150	3967.6	2033.9	2007.5	-1823000.0	-5755015.0	13844.0
195.151	4534.4	2235.3	2474.3	-2003000.0	-6686303.0	15156.0
195.152	2554.4	-1800.6	-2458.3	1630000.0	-3437332.0	9563.0
195.153	3121.5	-1614.6	-1995.6	1463000.0	-4368544.0	10876.0
195.154	4539.1	1828.7	2838.2	-1621000.0	-6694111.0	16823.0
195.155	5105.9	2025.6	3304.4	-1797000.0	-7625399.0	18135.0
195.156	1803.0	-3168.2	-7003.5	2884000.0	-2204850.0	5925.0
195.157	2370.1	-2981.9	-6540.8	2717000.0	-3136061.0	7238.0
195.158	4136.3	3960.1	6363.6	-3609000.0	-6031241.0	14480.0
195.159	4703.1	4161.3	6830.5	-3789000.0	-6961529.0	15792.0
195.160	2386.0	-3619.6	-6779.8	3311000.0	-3162030.0	8924.0
195.161	2953.1	-3433.3	-6317.2	3144000.0	-4093242.0	10237.0
195.162	4720.8	3583.8	6586.5	-3236000.0	-6991042.0	17480.0
195.163	5287.6	3785.0	7053.4	-3416000.0	-7922329.0	18792.0
195.164	1809.8	-3245.8	-7297.1	2969000.0	-2216125.0	5934.0
195.165	2376.9	-3059.9	-6834.5	2802000.0	-3146337.0	7247.0
195.166	4142.6	3868.6	6059.1	-3518000.0	-6041644.0	14490.0
195.167	4709.3	4069.6	6526.0	-3698000.0	-6971957.0	15802.0
195.168	2379.1	-3544.2	-6486.3	3229000.0	-3150779.0	8914.0
195.169	2946.2	-3357.9	-6023.6	3062000.0	-4081991.0	10227.0
195.170	4714.6	3672.5	6891.1	-3324000.0	-6981614.0	17470.0
195.171	5281.3	3874.3	7357.9	-3505000.0	-7911927.0	18782.0
195.268	2015.0	-394.5	-1669.4	353034.0	-2551097.0	7597.0
195.269	3905.3	216.8	-128.7	-194005.0	-5653812.0	11972.0
195.270	2610.0	641.7	-83.3	-583524.0	-3527235.0	9776.0
195.271	4499.1	1313.6	1473.5	-1188000.0	-6628253.0	14148.0
195.272	2598.4	-844.9	-1445.2	779614.0	-3509176.0	10596.0
195.273	4488.8	-208.1	100.3	211463.0	-6612865.0	14972.0
195.274	3194.2	257.0	139.4	-204535.0	-4487111.0	12775.0
195.275	5083.4	909.4	1693.0	-790309.0	-7588104.0	17148.0
195.276	1962.7	-917.5	-2877.3	832950.0	-2465358.0	7402.0
195.277	3852.9	-299.0	-1334.4	279941.0	-5568098.0	11778.0
195.278	2662.6	1192.2	1132.1	-1091000.0	-3612898.0	9970.0
195.279	4551.5	1858.7	2688.6	-1691000.0	-6713967.0	14342.0
195.280	2545.8	-1368.0	-2653.7	1259000.0	-3423513.0	10401.0
195.281	4436.3	-741.7	-1094.7	701039.0	-6527176.0	14777.0
195.282	3246.8	811.5	1355.4	-716889.0	-4572774.0	12969.0
195.283	5136.0	1480.9	2910.9	-1318000.0	-7674767.0	17342.0
195.284	2021.5	-473.0	-1963.1	437762.0	-2561449.0	7606.0
195.285	3911.8	139.2	-425.5	-109759.0	-5665164.0	11982.0
195.286	2616.7	552.7	-389.0	-488361.0	-3538536.0	9786.0
195.287	4505.8	1214.8	1167.3	-1087000.0	-6639555.0	14159.0
195.288	2591.8	-768.0	-1152.0	700276.0	-3498849.0	10586.0
195.289	4482.2	-125.6	403.1	129066.0	-6602539.0	14961.0

195.290	3187.8	333.9	442.5	-281910.0	-4476733.0	12764.0
195.291	5076.8	990.0	1996.5	-871301.0	-7577778.0	17137.0
195.292	1969.1	-994.7	-3171.2	916384.0	-2475735.0	7412.0
195.293	3859.3	-380.2	-1629.2	367199.0	-5579475.0	11787.0
195.294	2669.2	1102.7	826.5	-995901.0	-3624224.0	9980.0
195.295	4558.0	1770.9	2383.4	-1600000.0	-6725319.0	14352.0
195.296	2539.2	-1291.1	-2360.8	1180000.0	-3412186.0	10391.0
195.297	4429.8	-663.3	-799.0	623244.0	-6516824.0	14767.0
195.298	3240.3	898.2	1659.6	-803113.0	-4562422.0	12958.0
195.299	5129.6	1563.7	3214.9	-1401000.0	-7664390.0	17332.0
196.1	-17622.6	21.9	-11963.3	-41474.0	29911790.0	-2566.0
196.2	-35200.8	25.0	-16299.2	-47419.0	58764840.0	-9281.0
196.3	-18521.6	29.0	-20405.9	-54977.0	31383850.0	1884.0
196.4	-36099.9	32.3	-24739.6	-61196.0	60246870.0	-4831.0
196.5	-13556.2	16.9	-9220.0	-31941.0	23012820.0	-1995.0
196.6	-31134.5	20.0	-13556.4	-37860.0	51865850.0	-8710.0
196.7	-14455.3	24.0	-17664.9	-45511.0	24484860.0	2455.0
196.8	-32033.6	27.3	-21999.1	-51715.0	53337880.0	-4260.0
196.9	-52779.1	28.2	-20644.6	-53521.0	87617860.0	-15997.0
196.10	-18251.9	26.9	-17870.0	-50882.0	30942230.0	549.0
196.11	-53408.5	33.3	-26550.6	-63165.0	88658270.0	-12881.0
196.12	-48712.8	23.2	-17902.3	-44038.0	80718870.0	-15425.0
196.13	-14185.5	21.8	-15128.5	-41390.0	24043270.0	1120.0
196.14	-49342.2	28.3	-23806.7	-53613.0	81749290.0	-12310.0
196.15	-35830.2	30.1	-22206.4	-57047.0	59795250.0	-6166.0
196.16	-31763.8	25.1	-19465.4	-47540.0	52896290.0	-5595.0
196.17	-9712.1	20.3	-9995.8	-38498.0	16927500.0	466.0
196.18	-27290.3	23.5	-14326.8	-44508.0	45780540.0	-6249.0
196.19	-10611.1	27.4	-18436.9	-51979.0	18399560.0	4916.0
196.20	-28189.3	30.7	-22769.5	-58171.0	47252600.0	-1799.0
196.21	-5645.7	15.3	-7252.1	-28978.0	10028530.0	1037.0
196.22	-23224.0	18.4	-11584.3	-34950.0	38881560.0	-5678.0
196.23	-6544.8	22.5	-15698.0	-42599.0	11500570.0	5487.0
196.24	-24123.0	25.7	-20027.6	-48700.0	40353610.0	-1228.0
196.25	-44868.6	26.6	-18668.8	-50470.0	74633570.0	-12965.0
196.26	-10341.4	25.3	-15901.4	-47855.0	17957940.0	3581.0
196.27	-45498.0	31.7	-24576.8	-60145.0	75663980.0	-9849.0
196.28	-40802.3	21.6	-15926.9	-40960.0	67734580.0	-12394.0
196.29	-6275.0	20.3	-13160.2	-38391.0	11058970.0	4152.0
196.30	-41431.6	26.7	-21834.8	-50633.0	68765020.0	-9278.0
196.31	-4438.4	19.3	-8682.6	-36525.0	8271644.0	2487.0
196.32	-22016.6	22.5	-13013.1	-42576.0	37127690.0	-4228.0
196.33	-5067.7	24.2	-14588.4	-45858.0	9305084.0	5602.0
196.34	-22645.9	27.4	-18922.0	-52016.0	38158130.0	-1113.0
196.35	-372.1	14.2	-5938.8	-26973.0	1368654.0	3058.0
196.36	-17950.3	17.4	-10270.2	-33028.0	30218700.0	-3657.0
196.37	-1001.3	19.2	-11847.1	-36406.0	2402120.0	6173.0
196.38	-18579.6	22.4	-16180.6	-42534.0	31259140.0	-542.0
196.39	-27919.6	28.5	-20235.4	-54056.0	46810980.0	-3134.0
196.40	-23853.3	23.5	-17492.9	-44561.0	39912000.0	-2563.0
196.41	-20786.8	22.5	-12750.4	-42676.0	35109510.0	-3779.0
196.42	-38365.0	25.6	-17088.2	-48589.0	63962560.0	-10494.0
196.43	-21685.8	29.7	-21193.3	-56208.0	36581560.0	672.0
196.44	-39264.1	32.9	-25529.3	-62400.0	65434590.0	-6043.0
196.45	-16720.4	17.5	-10007.0	-33138.0	28200540.0	-3208.0
196.46	-34298.7	20.6	-14345.3	-39032.0	57053560.0	-9923.0
196.47	-17619.5	24.7	-18452.4	-46728.0	29682580.0	1243.0
196.48	-35197.8	27.9	-22787.9	-52893.0	58535600.0	-5472.0
196.49	-55943.4	28.9	-21434.1	-54723.0	92815550.0	-17209.0
196.50	-21416.1	27.5	-18657.8	-52095.0	36139950.0	-664.0

196.51	-56572.7	34.0	-27339.5	-64358.0	93855990.0	-14094.0
196.52	-51877.0	23.9	-18692.1	-45246.0	85916580.0	-16638.0
196.53	-17349.8	22.5	-15916.5	-42604.0	29240960.0	-92.0
196.54	-52506.4	28.9	-24596.5	-54832.0	86987000.0	-13523.0
196.55	-38994.4	30.7	-22996.1	-58244.0	64992970.0	-7379.0
196.56	-34928.1	25.7	-20254.8	-48737.0	58093980.0	-6807.0
196.57	-22896.3	22.9	-13275.2	-43481.0	38564640.0	-4587.0
196.58	-40474.5	26.1	-17614.3	-49374.0	67427700.0	-11303.0
196.59	-23525.6	27.9	-19183.2	-52904.0	39605080.0	-1472.0
196.60	-41103.9	31.2	-23522.5	-59049.0	68458100.0	-8187.0
196.61	-18829.9	17.9	-10531.8	-33938.0	31665680.0	-4016.0
196.62	-36408.2	21.0	-14871.8	-39839.0	60518700.0	-10731.0
196.63	-19459.2	22.9	-16441.7	-43419.0	32696120.0	-901.0
196.64	-37037.6	26.1	-20780.9	-49530.0	61549120.0	-7616.0
196.108	-12469.8	79.5	14208.7	-150684.0	21228280.0	-26944.0
196.109	-16581.8	100.0	3599.7	-189494.0	27975680.0	-22291.0
196.110	-16762.9	131.6	-22225.4	-249321.0	28269770.0	-21327.0
196.111	-20874.6	154.0	-33489.4	-291897.0	35027240.0	-16676.0
196.112	-6976.5	-151.5	1139.1	287142.0	12211110.0	16149.0
196.113	-11090.0	-140.4	-9778.5	266137.0	18958130.0	20797.0
196.114	-11279.8	-180.8	-33662.5	342605.0	19270010.0	21702.0
196.115	-15390.9	-161.2	-44261.9	305468.0	26017640.0	26351.0
196.116	-12192.9	104.2	23444.9	-197531.0	20768490.0	-20560.0
196.117	-16305.1	126.4	12798.8	-239545.0	27525840.0	-15908.0
196.118	-17046.3	130.2	-30816.1	-246749.0	28737910.0	-27660.0
196.119	-21158.2	151.8	-42080.0	-287667.0	35485340.0	-23012.0
196.120	-6699.7	-130.6	10312.0	247402.0	11751290.0	22536.0
196.121	-10811.7	-115.8	-393.0	219525.0	18508690.0	27186.0
196.122	-11556.1	-187.5	-41931.8	355222.0	19729950.0	15368.0
196.123	-15666.5	-168.4	-52649.6	319074.0	26477760.0	20015.0
196.124	-12301.8	88.6	16959.1	-167976.0	20950880.0	-26170.0
196.125	-16412.7	107.0	6347.6	-202678.0	27698560.0	-21517.0
196.126	-16590.1	129.9	-16235.7	-246147.0	27993580.0	-20544.0
196.127	-20702.4	153.0	-27503.3	-289936.0	34740910.0	-15892.0
196.128	-7171.5	-244.5	-6434.6	463285.0	12531670.0	15286.0
196.129	-11283.0	-225.6	-16968.8	427437.0	19279200.0	19943.0
196.130	-11474.5	-254.2	-41127.5	481639.0	19590640.0	20844.0
196.131	-15585.5	-234.1	-51745.6	443586.0	26338300.0	25492.0
196.132	-12020.4	105.3	26501.7	-199451.0	20492230.0	-19785.0
196.133	-16132.8	124.1	15903.1	-235126.0	27239530.0	-15133.0
196.134	-16873.5	125.8	-24834.5	-238444.0	28451720.0	-26886.0
196.135	-20985.5	147.7	-36103.9	-279876.0	35209120.0	-22238.0
196.136	-6893.5	-218.2	3068.7	413493.0	12072150.0	21676.0
196.137	-11004.4	-202.7	-7509.5	384027.0	18819830.0	26328.0
196.138	-11750.7	-258.9	-50067.4	490540.0	20050610.0	14499.0
196.139	-15861.7	-239.2	-60677.1	453245.0	26798270.0	19149.0
196.140	-5541.5	-20.8	48562.3	39499.0	9854952.0	-18447.0
196.141	-9652.9	-0.9	38047.4	1624.0	16602510.0	-13790.0
196.142	-19872.7	19.0	-71186.0	-36069.0	33381280.0	172.0
196.143	-23983.6	37.7	-82378.5	-71441.0	40128960.0	4815.0
196.144	-3889.4	-74.0	45551.7	140196.0	7142843.0	-5499.0
196.145	-8000.9	-54.0	35037.9	102309.0	13891370.0	-842.0
196.146	-18228.4	-92.7	-74304.4	175600.0	30678190.0	13070.0
196.147	-22339.4	-73.8	-85508.3	139879.0	37425840.0	17713.0
196.148	-5489.7	-20.4	49448.8	38597.0	9768087.0	-18215.0
196.149	-9601.7	-0.6	38883.2	1120.0	16515490.0	-13559.0
196.150	-19814.7	43.2	-68896.8	-81807.0	33285980.0	423.0
196.151	-23926.0	62.3	-80146.4	-118115.0	40033560.0	5068.0
196.152	-3942.6	-74.0	44553.1	140148.0	7230354.0	-5728.0
196.153	-8053.5	-54.5	34090.0	103232.0	13978030.0	-1073.0



196.154	-18285.3	-118.3	-76430.8	224262.0	30773760.0	12815.0
196.155	-22396.5	-99.0	-87659.2	187537.0	37521370.0	17458.0
196.156	-4620.6	60.3	79173.2	-114340.0	8342447.0	2846.0
196.157	-8731.3	79.6	68730.6	-150756.0	15086180.0	7501.0
196.158	-20809.2	18.5	-99503.1	-35045.0	34913830.0	-20942.0
196.159	-24920.6	37.8	-110800.0	-71637.0	41661380.0	-16298.0
196.160	-2968.2	4.5	76155.7	-8488.0	5630413.0	15790.0
196.161	-7078.9	23.7	65713.0	-44905.0	12375150.0	20445.0
196.162	-19164.4	-90.6	-102600.0	171756.0	32220870.0	-8043.0
196.163	-23275.9	-71.3	-113900.0	135188.0	38968400.0	-3398.0
196.164	-4569.3	63.1	80047.2	-119563.0	8258454.0	3081.0
196.165	-8680.5	82.0	69555.9	-155454.0	15009060.0	7735.0
196.166	-20752.6	41.8	-97369.3	-79288.0	34818180.0	-20689.0
196.167	-24864.1	61.2	-108600.0	-116027.0	41575710.0	-16044.0
196.168	-3019.9	1.1	75265.6	-2126.0	5715305.0	15554.0
196.169	-7130.6	20.3	64823.0	-38543.0	12462040.0	20209.0
196.170	-19222.8	-113.0	-104900.0	214087.0	32316060.0	-8293.0
196.171	-23333.7	-94.3	-116100.0	178685.0	39063740.0	-3649.0
196.268	-5744.0	-4.6	22954.5	8695.0	10183610.0	-17269.0
196.269	-19450.3	64.1	-12142.0	-121413.0	32688380.0	-1746.0
196.270	-10040.4	20.6	-11983.5	-39078.0	17234260.0	-11654.0
196.271	-23744.5	91.2	-49381.6	-172816.0	39729580.0	3835.0
196.272	-4093.5	-56.8	19770.0	107673.0	7477093.0	-4318.0
196.273	-17801.5	-5.0	-15905.5	9427.0	29976430.0	11197.0
196.274	-8396.4	-82.8	-15169.0	156828.0	14541090.0	1251.0
196.275	-22101.6	-16.6	-52446.7	31468.0	37036140.0	16733.0
196.276	-5468.4	21.1	32088.7	-39978.0	9733488.0	-10878.0
196.277	-19174.1	85.9	-3041.4	-162851.0	32228410.0	4633.0
196.278	-10322.3	18.2	-20574.7	-34410.0	17702780.0	-17988.0
196.279	-24026.5	90.1	-58021.8	-170663.0	40198080.0	-2503.0
196.280	-3816.7	-34.2	28983.2	64876.0	7023276.0	2067.0
196.281	-17523.0	16.9	-6573.0	-32065.0	29517040.0	17573.0
196.282	-8677.4	-81.4	-23701.2	154345.0	14999850.0	-5081.0
196.283	-22379.8	-20.1	-60922.7	38177.0	37495600.0	10396.0
196.284	-5692.0	-4.2	23865.2	7931.0	10096790.0	-17037.0
196.285	-19398.8	62.8	-11296.3	-119016.0	32601430.0	-1515.0
196.286	-9987.3	22.8	-10194.7	-43249.0	17147720.0	-11410.0
196.287	-23690.5	103.0	-47599.1	-195206.0	39643280.0	4079.0
196.288	-4148.6	-73.2	18150.3	138709.0	7568123.0	-4567.0
196.289	-17858.4	-28.4	-17930.5	53781.0	30072000.0	10939.0
196.290	-8454.4	-106.1	-17433.9	201031.0	14636390.0	994.0
196.291	-22160.0	-39.9	-54570.3	75641.0	37131330.0	16480.0
196.292	-5415.1	20.4	33123.4	-38566.0	9647002.0	-10650.0
196.293	-19122.5	85.2	-2135.6	-161484.0	32151490.0	4865.0
196.294	-10268.8	21.6	-18728.1	-40894.0	17616350.0	-17743.0
196.295	-23972.8	97.5	-56159.7	-184708.0	40111700.0	-2261.0
196.296	-3872.1	-52.0	27294.2	98457.0	7114229.0	1817.0
196.297	-17580.6	-8.8	-8697.3	16676.0	29612440.0	17316.0
196.298	-8734.7	-106.3	-25874.1	201481.0	15095320.0	-5337.0
196.299	-22437.1	-44.0	-63058.4	83376.0	37591070.0	10143.0
198.1	967.2	19.1	-270.2	-20493.0	-611971.4	-5271.0
198.2	965.2	21.1	-262.3	-21789.0	-605398.6	-9805.0
198.3	458.0	26.9	-318.4	-30048.0	207792.9	-5644.0
198.4	456.0	29.1	-316.6	-31595.0	214386.8	-10178.0
198.5	745.7	14.6	-212.6	-15605.0	-473584.8	-4053.0
198.6	743.7	16.5	-204.4	-16898.0	-467005.9	-8587.0
198.7	236.5	22.3	-262.0	-25148.0	346184.6	-4426.0
198.8	234.5	24.7	-260.2	-26842.0	352793.5	-8960.0
198.9	963.2	23.7	-260.3	-23611.0	-598769.6	-14340.0
198.10	610.8	24.7	-303.5	-27241.0	-38143.7	-5532.0

198.11	606.8	29.4	-299.0	-30639.0	-24886.9	-14601.0
198.12	741.8	19.3	-205.7	-18911.0	-460343.6	-13122.0
198.13	389.3	20.0	-246.7	-22308.0	100249.0	-4314.0
198.14	385.3	24.9	-244.2	-25755.0	113509.8	-13383.0
198.15	608.8	26.8	-300.3	-28714.0	-31543.8	-10067.0
198.16	387.3	22.3	-243.1	-23879.0	106859.9	-8848.0
198.17	967.3	18.3	-271.9	-19939.0	-613777.1	-3230.0
198.18	965.4	20.1	-263.7	-21098.0	-607212.9	-7765.0
198.19	458.2	26.0	-319.4	-29377.0	205988.6	-3603.0
198.20	456.2	27.9	-315.0	-30699.0	212565.5	-8138.0
198.21	745.9	13.7	-215.2	-15057.0	-475367.0	-2012.0
198.22	743.9	15.5	-205.6	-16200.0	-468823.2	-6547.0
198.23	236.7	21.6	-266.0	-24683.0	344385.3	-2385.0
198.24	234.7	23.4	-259.1	-25844.0	350960.2	-6920.0
198.25	963.4	22.4	-257.9	-22611.0	-600601.9	-12300.0
198.26	610.9	23.9	-303.3	-26669.0	-39967.3	-3491.0
198.27	607.0	28.1	-296.5	-29657.0	-26725.2	-12561.0
198.28	741.9	17.9	-201.2	-17849.0	-462202.3	-11082.0
198.29	389.5	19.2	-246.7	-21729.0	98446.7	-2273.0
198.30	385.5	23.7	-240.5	-24857.0	111679.5	-11343.0
198.31	967.4	17.7	-274.4	-19538.0	-614978.7	-1870.0
198.32	965.5	19.5	-264.7	-20675.0	-608425.5	-6405.0
198.33	611.0	23.3	-303.3	-26277.0	-41182.0	-2131.0
198.34	609.1	25.0	-298.8	-27368.0	-34582.7	-6666.0
198.35	746.0	13.2	-218.3	-14658.0	-476564.7	-652.0
198.36	744.0	14.9	-206.9	-15777.0	-470036.8	-5187.0
198.37	389.6	18.6	-246.8	-21333.0	97231.1	-913.0
198.38	387.6	20.4	-241.2	-22492.0	103811.0	-5448.0
198.39	609.0	25.7	-299.9	-27893.0	-33365.1	-8026.0
198.40	387.5	21.1	-242.5	-22990.0	105025.6	-6808.0
198.41	967.1	19.5	-270.2	-20778.0	-611260.8	-6087.0
198.42	965.1	21.5	-262.1	-22077.0	-604675.8	-10622.0
198.43	457.9	27.3	-318.4	-30307.0	208507.5	-6460.0
198.44	455.9	29.6	-316.9	-31987.0	215119.5	-10995.0
198.45	745.6	15.0	-212.6	-15884.0	-472874.1	-4869.0
198.46	743.7	17.0	-204.6	-17203.0	-466257.9	-9404.0
198.47	236.4	22.7	-262.3	-25439.0	346904.2	-5242.0
198.48	234.5	25.1	-260.6	-27173.0	353547.5	-9777.0
198.49	963.1	24.1	-262.0	-23958.0	-598046.1	-15156.0
198.50	610.7	25.0	-303.8	-27492.0	-37426.0	-6348.0
198.51	606.7	29.9	-300.5	-30989.0	-24160.2	-15417.0
198.52	741.7	19.8	-207.0	-19271.0	-459618.0	-13938.0
198.53	389.2	20.4	-246.0	-22598.0	100967.7	-5130.0
198.54	385.2	25.4	-246.1	-26140.0	114236.5	-14199.0
198.55	608.7	27.3	-300.6	-29081.0	-30812.1	-10883.0
198.56	387.2	22.8	-243.6	-24254.0	107590.6	-9665.0
198.57	967.1	19.8	-270.4	-20984.0	-610769.8	-6631.0
198.58	965.1	21.8	-262.2	-22287.0	-604176.9	-11166.0
198.59	610.6	25.3	-304.0	-27678.0	-36955.4	-6892.0
198.60	608.6	27.6	-300.9	-29344.0	-30333.5	-11427.0
198.61	745.6	15.2	-212.6	-16086.0	-472382.1	-5413.0
198.62	743.6	17.3	-205.3	-17476.0	-465781.2	-9948.0
198.63	389.2	20.7	-246.3	-22791.0	101463.7	-5674.0
198.64	387.2	23.1	-244.0	-24492.0	108094.6	-10209.0
198.108	1642.8	-100.9	-1621.1	86591.0	-1944468.0	-4487.0
198.109	1162.2	-69.8	-1145.4	53843.0	-1158324.0	-7293.0
198.110	998.0	368.5	-3860.6	-376401.0	-890957.1	-7838.0
198.111	517.7	403.5	-4024.4	-412780.0	-105099.2	-10643.0
198.112	560.1	-401.2	-1583.1	418971.0	-175976.6	2224.0
198.113	78.9	-377.9	-1098.4	395871.0	610930.1	-584.0

198.114	-89.6	-59.3	1203.2	95502.0	886024.9	-1139.0
198.115	-569.5	-29.2	1687.4	65033.0	1670603.0	-3943.0
198.116	1702.7	38.1	-1103.3	-40959.0	-2043281.0	-4346.0
198.117	1222.2	73.6	-627.4	-78415.0	-1257111.0	-7153.0
198.118	936.1	300.0	-4053.8	-319674.0	-788651.9	-7985.0
198.119	455.8	332.8	-4203.9	-353805.0	-3642.9	-10790.0
198.120	620.0	-269.9	-1062.9	299727.0	-274200.0	2364.0
198.121	139.5	-244.3	-577.8	274193.0	511666.2	-442.0
198.122	-149.2	-121.5	701.6	143963.0	984170.3	-1278.0
198.123	-629.1	-95.1	1185.4	117568.0	1768492.0	-4082.0
198.124	1596.1	-884.7	-1809.2	855426.9	-1867309.0	-4500.0
198.125	1115.8	-858.9	-1334.3	828098.1	-1082089.0	-7305.0
198.126	952.9	-459.0	-990.7	434139.0	-816392.2	-7847.0
198.127	472.5	-420.0	-1179.8	393693.0	-30612.6	-10653.0
198.128	597.0	285.3	-1296.7	-228812.0	-236897.6	2211.0
198.129	116.9	317.8	-812.8	-261417.0	548311.0	-594.0
198.130	-51.9	674.3	1516.7	-599734.0	823897.8	-1150.0
198.131	-531.8	705.0	2000.4	-630860.0	1609162.0	-3954.0
198.132	1657.8	-747.7	-1291.7	728814.0	-1968665.0	-4355.0
198.133	1177.3	-720.8	-816.9	700165.0	-1183496.0	-7161.0
198.134	891.1	-536.7	-1148.2	500355.0	-714870.6	-7993.0
198.135	410.8	-502.8	-1318.1	465071.0	70608.3	-10799.0
198.136	658.0	419.7	-775.5	-351774.0	-336873.1	2353.0
198.137	177.8	444.8	-293.1	-376701.0	448531.2	-452.0
198.138	-112.1	590.0	1011.1	-527173.0	922594.1	-1291.0
198.139	-592.1	620.1	1495.3	-557521.0	1707873.0	-4095.0
198.140	2018.9	-710.0	-4866.9	696116.0	-2560108.0	1777.0
198.141	1538.6	-683.9	-4392.4	667601.0	-1774888.0	-1029.0
198.142	-138.2	672.3	-5847.0	-656704.0	965959.4	-9416.0
198.143	-618.2	706.2	-5895.7	-689910.0	1751256.0	-12220.0
198.144	1696.1	-782.3	-4869.9	773570.0	-2032954.0	3794.0
198.145	1215.8	-756.3	-4395.5	745122.0	-1246734.0	989.0
198.146	-464.9	522.7	-3352.4	-489575.0	1500125.0	-7407.0
198.147	-945.0	556.4	-3400.2	-522565.0	2285395.0	-10211.0
198.148	2005.3	-944.6	-4923.2	926298.1	-2537556.0	1774.0
198.149	1524.7	-914.6	-4447.0	894782.0	-1751412.0	-1032.0
198.150	-149.3	466.7	-5961.5	-461480.0	985145.0	-9412.0
198.151	-629.5	498.2	-6032.5	-493006.0	1770390.0	-12217.0
198.152	1709.4	-555.8	-4821.8	549774.0	-2054582.0	3796.0
198.153	1229.2	-526.3	-4343.4	518565.0	-1269336.0	991.0
198.154	-453.3	733.5	-3160.3	-688334.0	1481066.0	-7409.0
198.155	-933.5	765.3	-3187.9	-719503.0	2266311.0	-10214.0
198.156	2218.0	-269.4	-3155.4	291148.0	-2886626.0	2243.0
198.157	1738.0	-238.6	-2675.3	258880.0	-2101330.0	-562.0
198.158	-342.8	439.0	-6865.4	-461807.0	1302083.0	-9898.0
198.159	-823.1	469.7	-6943.2	-492688.0	2087303.0	-12703.0
198.160	1895.5	-343.7	-3153.3	371615.0	-2359396.0	4261.0
198.161	1415.4	-312.8	-2673.2	339346.0	-1574125.0	1456.0
198.162	-669.6	298.3	-4444.2	-303860.0	1835223.0	-7889.0
198.163	-1149.8	329.0	-4522.0	-334675.0	2621468.0	-10694.0
198.164	2204.0	-500.7	-3215.4	517472.0	-2863176.0	2239.0
198.165	1723.7	-466.1	-2733.4	482352.0	-2077956.0	-566.0
198.166	-354.4	221.4	-6976.2	-255776.0	1321142.0	-9896.0
198.167	-834.6	252.5	-7054.7	-287019.0	2106387.0	-12701.0
198.168	1909.4	-111.0	-3092.2	144094.0	-2382872.0	4264.0
198.169	1429.4	-80.1	-2612.1	111825.0	-1597576.0	1459.0
198.170	-658.7	504.6	-4392.6	-500609.0	1817987.0	-7893.0
198.171	-1138.7	538.1	-4440.4	-533547.0	2602283.0	-10697.0
198.268	1826.3	-222.0	-2183.0	216673.0	-2245942.0	1141.0
198.269	224.7	-119.0	-594.5	108385.0	373791.7	-8212.0

198.270	1180.3	214.8	-2451.5	-214807.0	-1189735.0	-2214.0
198.271	-420.0	327.6	-2982.5	-330269.0	1427509.0	-11563.0
198.272	1502.6	-296.7	-2191.9	296388.0	-1717016.0	3157.0
198.273	-99.6	-203.6	-583.0	201193.0	903569.4	-6198.0
198.274	853.6	72.4	-305.0	-57773.0	-655672.8	-205.0
198.275	-747.2	175.2	-351.0	-159870.0	1962548.0	-9556.0
198.276	1885.7	-91.8	-1674.5	96264.0	-2342881.0	1280.0
198.277	284.5	20.1	-75.6	-19036.0	275869.0	-8073.0
198.278	1118.6	138.0	-2678.1	-149281.0	-1088379.0	-2359.0
198.279	-481.5	248.0	-3227.8	-262587.0	1528916.0	-11709.0
198.280	1562.7	-163.4	-1673.2	174801.0	-1814777.0	3298.0
198.281	-39.1	-74.1	-62.7	83804.0	804364.2	-6056.0
198.282	792.0	3.2	-666.1	-1021.0	-554829.4	-350.0
198.283	-807.8	100.6	-662.7	-97687.0	2061182.0	-9698.0
198.284	1812.8	-457.8	-2239.8	447726.0	-2223365.0	1139.0
198.285	211.0	-357.0	-651.8	341618.0	396310.1	-8215.0
198.286	1167.1	-29.3	-1766.7	24563.0	-1168082.0	-2215.0
198.287	-432.9	88.1	-2544.3	-98169.0	1449238.0	-11564.0
198.288	1515.2	-79.3	-2116.3	87835.0	-1737821.0	3157.0
198.289	-87.8	8.2	-495.5	1022.0	884081.3	-6200.0
198.290	864.8	288.0	-145.1	-260862.0	-674217.9	-208.0
198.291	-735.9	392.1	-193.3	-365164.0	1943413.0	-9559.0
198.292	1872.7	-318.9	-1721.5	320324.0	-2321177.0	1279.0
198.293	270.9	-222.3	-135.7	218250.0	298169.7	-8075.0
198.294	1105.5	-103.6	-2041.7	87245.0	-1066701.0	-2361.0
198.295	-494.4	8.3	-2697.8	-29827.0	1549645.0	-11710.0
198.296	1575.1	52.0	-1596.4	-31396.0	-1835633.0	3297.0
198.297	-27.6	132.9	22.6	-111651.0	785405.0	-6059.0
198.298	803.6	221.1	-524.1	-206583.0	-573889.2	-352.0
198.299	-796.2	316.1	-456.3	-301443.0	2042124.0	-9700.0
200.1	-17651.6	-15.6	-11984.9	29508.0	29964440.0	2670.0
200.2	-35246.8	-17.5	-16329.6	33202.0	58843180.0	9448.0
200.3	-18553.3	-22.7	-20497.0	43055.0	31435810.0	-1756.0
200.4	-36148.4	-24.6	-24831.0	46575.0	60324580.0	5022.0
200.5	-13578.4	-12.1	-9235.7	22886.0	23047200.0	2074.0
200.6	-31173.6	-14.0	-13579.3	26572.0	51925940.0	8851.0
200.7	-14480.1	-19.2	-17747.2	36388.0	24528570.0	-2352.0
200.8	-32075.2	-21.0	-22076.8	39871.0	53407330.0	4425.0
200.9	-52841.8	-19.4	-20661.1	36804.0	87701960.0	16226.0
200.10	-18282.8	-20.6	-17945.8	39034.0	30994400.0	-428.0
200.11	-53473.0	-24.3	-26602.7	46089.0	88741920.0	13127.0
200.12	-48768.7	-15.9	-17906.7	30139.0	80814700.0	15629.0
200.13	-14209.7	-17.1	-15196.1	32380.0	24087130.0	-1025.0
200.14	-49399.8	-20.8	-23849.5	39470.0	81844680.0	12530.0
200.15	-35877.9	-22.5	-22280.7	42634.0	59873160.0	6350.0
200.16	-31804.7	-19.0	-19528.0	35911.0	52965920.0	5753.0
200.17	-9733.5	-14.6	-10007.5	27672.0	16962070.0	-390.0
200.18	-27328.6	-16.5	-14357.5	31344.0	45840840.0	6388.0
200.19	-10635.2	-21.8	-18525.3	41241.0	18443450.0	-4816.0
200.20	-28230.3	-23.6	-22864.7	44774.0	47322210.0	1962.0
200.21	-5660.3	-11.1	-7258.5	21056.0	10044830.0	-986.0
200.22	-23255.5	-13.0	-11607.9	24715.0	38933570.0	5792.0
200.23	-6562.0	-18.3	-15772.7	34594.0	11526210.0	-5413.0
200.24	-24157.1	-20.1	-20113.1	38109.0	40414970.0	1365.0
200.25	-44923.7	-18.5	-18694.7	35022.0	74729590.0	13166.0
200.26	-10364.7	-19.7	-15972.9	37244.0	18002030.0	-3488.0
200.27	-45554.9	-23.4	-24639.2	44312.0	75759560.0	10067.0
200.28	-40850.5	-15.0	-15941.7	28344.0	67812360.0	12569.0
200.29	-6291.5	-16.1	-13224.1	30569.0	11084790.0	-4085.0
200.30	-41481.7	-19.9	-21885.1	37633.0	68852310.0	9471.0

200.31	-4454.7	-14.0	-8690.0	26454.0	8297511.0	-2430.0
200.32	-22049.9	-15.9	-13041.8	30094.0	37179250.0	4348.0
200.33	-5086.0	-19.0	-14659.2	36027.0	9330445.0	-5528.0
200.34	-22681.1	-20.9	-19000.5	39590.0	38219210.0	1250.0
200.35	-381.5	-10.5	-5940.3	19912.0	1384271.0	-3026.0
200.36	-17976.7	-12.4	-10292.6	23473.0	30262010.0	3752.0
200.37	-1012.8	-15.5	-11910.9	29338.0	2421205.0	-6125.0
200.38	-18607.9	-17.4	-16250.3	32904.0	31301970.0	653.0
200.39	-27959.8	-21.5	-20313.0	40811.0	46880790.0	3290.0
200.40	-23886.6	-18.0	-17562.9	34130.0	39963550.0	2693.0
200.41	-20818.9	-16.0	-12774.6	30253.0	35161370.0	3894.0
200.42	-38414.0	-17.9	-17118.0	33944.0	64040130.0	10672.0
200.43	-21720.6	-23.1	-21286.2	43741.0	36642740.0	-532.0
200.44	-39315.7	-24.9	-25616.3	47273.0	65521510.0	6246.0
200.45	-16745.7	-12.5	-10025.3	23635.0	28244130.0	3298.0
200.46	-34340.8	-14.4	-14367.2	27322.0	57122890.0	10075.0
200.47	-17647.4	-19.6	-18535.0	37105.0	29725500.0	-1128.0
200.48	-35242.5	-21.4	-22862.7	40592.0	58604260.0	5649.0
200.49	-56009.1	-19.8	-21448.1	37552.0	92898900.0	17449.0
200.50	-21450.1	-21.0	-18734.6	39761.0	36191330.0	796.0
200.51	-56640.2	-24.7	-27388.8	46821.0	93938870.0	14351.0
200.52	-51935.9	-16.3	-18693.7	30859.0	86011650.0	16853.0
200.53	-17376.9	-17.5	-15984.5	33084.0	29284090.0	199.0
200.54	-52567.0	-21.2	-24635.9	40195.0	87071640.0	13754.0
200.55	-39045.2	-22.9	-23066.5	43339.0	65080090.0	7574.0
200.56	-34972.0	-19.3	-20313.4	36619.0	58162850.0	6977.0
200.57	-22930.4	-16.2	-13300.9	30753.0	38626000.0	4710.0
200.58	-40525.5	-18.2	-17643.3	34447.0	67504760.0	11488.0
200.59	-23561.6	-21.2	-19260.1	40254.0	39665960.0	1612.0
200.60	-41156.7	-23.1	-23590.0	43804.0	68544720.0	8390.0
200.61	-18857.2	-12.7	-10551.5	24132.0	31708760.0	4114.0
200.62	-36452.3	-14.7	-14891.3	27829.0	60597520.0	10891.0
200.63	-19488.4	-17.7	-16510.0	33562.0	32748720.0	1015.0
200.64	-37083.5	-19.6	-20837.2	37095.0	61627480.0	7793.0
200.108	-6709.9	171.2	9345.3	-324349.0	11768710.0	-22666.0
200.109	-10810.2	151.8	-1175.7	-287692.0	18499070.0	-27358.0
200.110	-11574.1	198.7	-41813.9	-376592.0	19755390.0	-15409.0
200.111	-15672.6	175.9	-52287.2	-333331.0	26486210.0	-20094.0
200.112	-12213.9	-182.3	25966.2	345373.0	20803170.0	20704.0
200.113	-16315.3	-198.3	14881.0	375695.0	27543260.0	16019.0
200.114	-17080.0	-182.4	-30169.1	345620.0	28799370.0	27967.0
200.115	-21179.8	-200.6	-41315.4	380205.0	35519860.0	23285.0
200.116	-6989.3	188.0	201.5	-356170.0	12227860.0	-21841.0
200.117	-11091.2	172.6	-10546.9	-327083.0	18967830.0	-26533.0
200.118	-11295.2	196.6	-33674.8	-372469.0	19296100.0	-16185.0
200.119	-15394.5	173.0	-44039.2	-327839.0	26026720.0	-20873.0
200.120	-12493.1	-162.7	17476.0	308308.0	21262380.0	21526.0
200.121	-16594.3	-178.4	6376.1	338078.0	27992520.0	16843.0
200.122	-16794.8	-178.5	-21609.9	338165.0	28321680.0	27191.0
200.123	-20894.3	-197.8	-32732.5	374753.0	35052250.0	22506.0
200.124	-6858.4	193.8	2002.0	-367308.0	12011050.0	-21783.0
200.125	-10958.5	173.4	-8482.4	-328592.0	18741470.0	-26476.0
200.126	-11721.3	205.8	-50476.1	-389922.0	19998060.0	-14539.0
200.127	-15822.0	180.2	-61083.5	-341562.0	26728330.0	-19225.0
200.128	-12067.1	-178.3	32980.9	337831.0	20570390.0	19836.0
200.129	-16168.9	-192.6	21820.2	364987.0	27300380.0	15160.0
200.130	-16935.8	-169.2	-22660.3	320627.0	28555930.0	27107.0
200.131	-21035.8	-187.1	-33831.1	354590.0	35286370.0	22424.0
200.132	-7138.9	214.2	-7396.8	-405906.0	12479930.0	-20957.0
200.133	-11240.5	194.9	-18027.4	-369300.0	19209970.0	-25652.0



200.134	-11442.9	203.4	-41831.9	-385516.0	19538650.0	-15324.0
200.135	-15542.5	180.3	-52145.5	-341756.0	26269200.0	-20013.0
200.136	-12352.1	-170.1	23917.1	322339.0	21038120.0	20662.0
200.137	-16451.6	-182.8	12900.4	346390.0	27758700.0	15980.0
200.138	-16651.6	-167.6	-14174.8	317646.0	28087990.0	26320.0
200.139	-20750.7	-187.2	-25245.7	354693.0	34818660.0	21638.0
200.140	-2963.9	0.3	77823.6	-486.0	5623503.0	-15949.0
200.141	-7064.9	-16.5	67171.9	31295.0	12358700.0	-20637.0
200.142	-19202.0	71.8	-102600.0	-135977.0	32281330.0	8264.0
200.143	-23300.6	49.7	-113600.0	-94139.0	39002130.0	3580.0
200.144	-4619.9	-111.6	83153.8	211478.0	8341624.0	-2942.0
200.145	-8720.9	-128.3	72499.2	243157.0	15068820.0	-7629.0
200.146	-20850.6	-37.7	-99508.8	71437.0	34983330.0	21278.0
200.147	-24949.2	-59.8	-110500.0	113320.0	41714130.0	16594.0
200.148	-3007.2	5.8	75719.8	-11070.0	5694525.0	-15685.0
200.149	-7107.4	-13.0	65211.0	24651.0	12427920.0	-20375.0
200.150	-19248.4	66.8	-105000.0	-126681.0	32349570.0	8520.0
200.151	-23346.5	45.2	-116000.0	-85604.0	39080490.0	3837.0
200.152	-4577.3	-118.1	85313.1	223727.0	8271426.0	-3202.0
200.153	-8678.9	-135.4	74611.2	256600.0	14999470.0	-7891.0
200.154	-20805.6	-33.5	-97221.1	63397.0	34904740.0	21019.0
200.155	-24904.3	-55.0	-108300.0	104307.0	41635520.0	16335.0
200.156	-3893.2	63.4	47442.4	-120085.0	7148879.0	-13182.0
200.157	-7995.0	45.8	36718.4	-86793.0	13882870.0	-17872.0
200.158	-18257.2	86.4	-74238.6	-163815.0	30730890.0	5673.0
200.159	-22355.2	64.8	-85206.8	-122885.0	37451840.0	990.0
200.160	-5550.2	-46.8	52632.3	88696.0	9872747.0	-175.0
200.161	-9651.9	-64.4	41908.3	121985.0	16602760.0	-4865.0
200.162	-19905.6	-26.0	-71212.4	49219.0	33432930.0	18685.0
200.163	-24003.6	-47.5	-82173.9	89947.0	40163890.0	14002.0
200.164	-3935.3	66.8	45517.3	-126666.0	7218205.0	-12920.0
200.165	-8036.2	47.3	34927.2	-89615.0	13952420.0	-17612.0
200.166	-18302.6	84.7	-76542.4	-160518.0	30799380.0	5933.0
200.167	-22400.9	62.6	-87545.5	-118534.0	37530250.0	1251.0
200.168	-5509.5	-53.3	54569.5	100995.0	9803066.0	-438.0
200.169	-9611.2	-70.9	43845.5	134285.0	16533080.0	-5128.0
200.170	-19858.6	-21.8	-68686.9	41234.0	33354850.0	18429.0
200.171	-23957.2	-43.7	-79723.5	82853.0	40085650.0	13745.0
200.268	-3848.2	56.9	28653.5	-107777.0	7075289.0	-2022.0
200.269	-17516.8	-2.6	-6589.0	4975.0	29508620.0	-17653.0
200.270	-8721.8	85.6	-23807.6	-162234.0	15078590.0	5226.0
200.271	-22383.1	12.4	-60554.2	-23485.0	37494760.0	-10378.0
200.272	-5500.6	-54.3	34284.0	102842.0	9785323.0	10986.0
200.273	-19172.1	-111.0	-1568.2	210375.0	32228920.0	-4633.0
200.274	-10370.4	-26.4	-20772.6	50055.0	17780580.0	18243.0
200.275	-24033.8	-92.5	-57681.5	175228.0	40206230.0	2637.0
200.276	-4126.1	75.7	19642.0	-143448.0	7530828.0	-1190.0
200.277	-17798.0	15.4	-15922.3	-29157.0	29977320.0	-16832.0
200.278	-8437.7	91.0	-15206.4	-172365.0	14610620.0	4450.0
200.279	-22102.3	12.7	-52114.6	-24071.0	37035960.0	-11158.0
200.280	-5780.2	-34.8	25063.0	65958.0	10244430.0	11815.0
200.281	-19451.0	-92.4	-10618.7	175100.0	32688200.0	-3813.0
200.282	-10086.4	-22.5	-12220.0	42643.0	17312590.0	17467.0
200.283	-23749.1	-90.1	-49011.8	170685.0	39738420.0	1855.0
200.284	-3892.2	63.0	26481.1	-119434.0	7147133.0	-1757.0
200.285	-17561.1	3.4	-8777.9	-6448.0	29587380.0	-17390.0
200.286	-8764.1	84.3	-25827.2	-159700.0	15147860.0	5488.0
200.287	-22427.0	11.5	-62581.3	-21703.0	37573640.0	-10123.0
200.288	-5457.9	-56.4	36229.2	106940.0	9716149.0	10726.0
200.289	-19128.3	-108.3	383.2	205313.0	32160020.0	-4891.0

200.290	-10326.5	-25.3	-18459.2	47892.0	17711720.0	17982.0
200.291	-23990.5	-88.8	-55413.8	168262.0	40137210.0	2381.0
200.292	-4171.5	80.4	17344.5	-152358.0	7605317.0	-930.0
200.293	-17841.7	19.6	-18009.6	-37215.0	30046240.0	-16568.0
200.294	-8481.1	88.9	-17292.0	-168397.0	14679620.0	4710.0
200.295	-22146.6	12.0	-54038.4	-22807.0	37114730.0	-10904.0
200.296	-5737.3	-36.6	27000.2	69311.0	10175310.0	11555.0
200.297	-19407.3	-90.0	-8726.2	170493.0	32619280.0	-4071.0
200.298	-10042.2	-21.4	-9903.6	40583.0	17243800.0	17206.0
200.299	-23706.2	-88.4	-46921.4	167584.0	39669290.0	1598.0
251.1	-318.9	-222.9	-39.4	215767.0	1491143.0	-4219.0
251.2	-2068.3	-247.5	-43.6	238383.0	4358583.0	-4115.0
251.3	-571.0	-392.5	-67.5	379675.0	1890223.0	-9472.0
251.4	-2320.4	-416.8	-71.6	401993.0	4757663.0	-9368.0
251.5	-243.9	-172.5	-30.6	167014.0	1145159.0	-3243.0
251.6	-1993.3	-197.1	-34.8	189618.0	4012599.0	-3140.0
251.7	-496.0	-342.0	-58.7	330906.0	1544239.0	-8496.0
251.8	-2245.3	-366.3	-62.8	353104.0	4411705.0	-8392.0
251.9	-3817.7	-271.8	-47.7	260619.0	7226022.0	-4011.0
251.10	-495.3	-341.6	-59.1	330505.0	1770417.0	-7896.0
251.11	-3994.1	-390.1	-67.3	374955.0	7505296.0	-7688.0
251.12	-3742.6	-221.2	-38.9	211703.0	6880064.0	-3035.0
251.13	-420.3	-291.2	-50.2	281754.0	1424433.0	-6920.0
251.14	-3919.1	-339.6	-58.5	326127.0	7159313.0	-6712.0
251.15	-2244.7	-366.0	-63.2	352922.0	4637856.0	-7792.0
251.16	-2169.7	-315.5	-54.4	304068.0	4291873.0	-6816.0
251.17	468.3	-211.4	-37.5	205106.0	201188.5	-4271.0
251.18	-1281.1	-236.1	-41.6	227817.0	3069177.0	-4167.0
251.19	216.2	-381.0	-65.5	369115.0	600485.6	-9523.0
251.20	-1533.2	-405.5	-69.7	391600.0	3468257.0	-9419.0
251.21	543.3	-160.9	-28.7	156340.0	-145303.3	-3295.0
251.22	-1206.1	-185.6	-32.8	179063.0	2722193.0	-3191.0
251.23	291.2	-330.5	-56.7	320242.0	253979.8	-8548.0
251.24	-1458.2	-355.0	-60.8	342790.0	3121274.0	-8444.0
251.25	-3030.5	-260.5	-45.8	250275.0	5935617.0	-4063.0
251.26	291.8	-330.1	-57.1	319920.0	480707.9	-7948.0
251.27	-3207.0	-378.9	-65.4	364635.0	6215865.0	-7740.0
251.28	-2955.5	-210.0	-36.9	201403.0	5589633.0	-3087.0
251.29	366.8	-279.7	-48.3	271166.0	134212.1	-6972.0
251.30	-3132.0	-328.3	-56.6	315765.0	5868881.0	-6764.0
251.31	993.0	-203.7	-36.2	197992.0	-658964.9	-4305.0
251.32	-756.4	-228.4	-40.3	220746.0	2208215.0	-4201.0
251.33	816.5	-322.5	-55.8	312860.0	-379432.4	-7982.0
251.34	-932.9	-347.1	-60.0	335478.0	2488463.0	-7878.0
251.35	1068.1	-153.3	-27.3	149246.0	-1005183.0	-3329.0
251.36	-681.4	-178.0	-31.5	171998.0	1862231.0	-3225.0
251.37	891.5	-272.0	-47.0	264103.0	-725925.2	-7006.0
251.38	-857.9	-296.6	-51.1	286694.0	2141480.0	-6902.0
251.39	-1457.6	-354.7	-61.3	342466.0	3348426.0	-7844.0
251.40	-1382.6	-304.2	-52.4	293686.0	3001442.0	-6868.0
251.41	-633.7	-227.5	-40.2	219997.0	2007325.0	-4199.0
251.42	-2383.1	-252.1	-44.4	242599.0	4874765.0	-4095.0
251.43	-885.8	-397.0	-68.3	383882.0	2406406.0	-9451.0
251.44	-2635.2	-421.3	-72.4	406120.0	5273845.0	-9347.0
251.45	-558.7	-177.1	-31.4	171247.0	1661342.0	-3223.0
251.46	-2308.1	-201.6	-35.5	193822.0	4528781.0	-3119.0
251.47	-810.8	-346.6	-59.4	335103.0	2060422.0	-8476.0
251.48	-2560.2	-370.8	-63.6	357263.0	4927862.0	-8372.0
251.49	-4132.5	-276.3	-48.5	264785.0	7742205.0	-3990.0
251.50	-810.2	-346.2	-59.9	334731.0	2286574.0	-7876.0

251.51	-4309.0	-394.6	-68.1	379105.0	8021453.0	-7667.0
251.52	-4057.5	-225.7	-39.7	215856.0	7396221.0	-3015.0
251.53	-735.2	-295.7	-51.0	285962.0	1940590.0	-6900.0
251.54	-4233.9	-344.1	-59.3	330265.0	7675495.0	-6692.0
251.55	-2559.6	-370.6	-64.0	357066.0	5154014.0	-7771.0
251.56	-2484.6	-320.0	-55.2	308204.0	4808030.0	-6796.0
251.57	-843.6	-230.6	-40.8	222809.0	2351105.0	-4185.0
251.58	-2593.0	-255.1	-44.9	245402.0	5218545.0	-4081.0
251.59	-1020.1	-349.2	-60.4	337544.0	2631354.0	-7862.0
251.60	-2769.5	-373.5	-64.5	359816.0	5498794.0	-7758.0
251.61	-768.6	-180.1	-31.9	174058.0	2005122.0	-3209.0
251.62	-2518.0	-204.6	-36.1	196593.0	4872561.0	-3105.0
251.63	-945.1	-298.8	-51.6	288762.0	2284370.0	-6886.0
251.64	-2694.5	-323.0	-55.7	310967.0	5151810.0	-6782.0
251.108	-48.6	120.6	-1908.1	-127939.0	813951.5	-2034.0
251.109	-553.2	120.5	-2627.0	-129017.0	1640736.0	-3319.0
251.110	-890.7	313.9	3016.4	-335257.0	2191163.0	-5649.0
251.111	-1394.4	296.3	2296.6	-318578.0	3016450.0	-6933.0
251.112	704.9	-781.3	-2441.5	786575.0	-407434.6	-3769.0
251.113	200.1	-779.8	-3160.1	784297.0	420099.4	-5054.0
251.114	-135.3	-656.8	2542.5	664423.0	966694.8	-7387.0
251.115	-639.5	-674.8	1820.5	681733.0	1792855.0	-8672.0
251.116	-106.2	220.3	-649.6	-219227.0	908318.9	-2569.0
251.117	-611.6	241.8	-1361.3	-240604.0	1736929.0	-3855.0
251.118	-833.4	243.3	1791.4	-273884.0	2097692.0	-5112.0
251.119	-1337.2	230.4	1069.9	-261881.0	2922953.0	-6397.0
251.120	647.4	-676.1	-1181.7	689940.0	-313214.7	-4303.0
251.121	142.4	-674.5	-1900.4	687502.0	514459.5	-5589.0
251.122	-76.3	-734.2	1289.7	731590.0	870198.1	-6845.0
251.123	-580.5	-753.2	567.6	749981.0	1696814.0	-8130.0
251.124	-78.0	153.1	-724.8	-160747.0	862413.2	-2171.0
251.125	-582.8	153.3	-1442.3	-161799.0	1689231.0	-3456.0
251.126	-920.8	272.9	4203.1	-290813.0	2240531.0	-5785.0
251.127	-1425.3	258.4	3492.5	-277233.0	3067615.0	-7071.0
251.128	737.4	-816.2	-3634.1	831698.1	-460880.2	-3631.0
251.129	232.4	-812.4	-4352.9	826965.1	366886.0	-4917.0
251.130	-103.5	-613.3	1378.9	632091.0	914404.6	-7251.0
251.131	-607.7	-631.1	656.9	649220.0	1740918.0	-8536.0
251.132	-136.9	276.3	542.2	-273901.0	958788.9	-2707.0
251.133	-641.9	282.4	-174.0	-280137.0	1786246.0	-3993.0
251.134	-863.0	215.0	2964.4	-242285.0	2146186.0	-5250.0
251.135	-1366.9	204.3	2243.2	-232565.0	2972423.0	-6536.0
251.136	677.4	-709.9	-2347.9	734807.0	-362645.3	-4170.0
251.137	173.0	-711.5	-3074.4	735241.0	464212.2	-5454.0
251.138	-44.9	-700.1	120.2	707831.0	818575.6	-6710.0
251.139	-548.9	-714.3	-596.7	722530.0	1644826.0	-7995.0
251.140	1200.5	-384.0	-7842.8	400760.0	-1224613.0	1565.0
251.141	695.5	-382.2	-8561.2	397371.0	-397330.0	279.0
251.142	-1611.2	140.6	8601.7	-163891.0	3373480.0	-10507.0
251.143	-2115.0	122.4	7880.0	-145977.0	4199742.0	-11791.0
251.144	1424.4	-668.8	-8015.2	685328.0	-1587843.0	1039.0
251.145	919.4	-667.0	-8733.6	681923.0	-760226.2	-246.0
251.146	-1383.5	-153.0	8459.5	140374.0	3004214.0	-11024.0
251.147	-1887.3	-171.3	7737.8	158291.0	3830475.0	-12308.0
251.148	1191.9	-372.0	-7484.9	389406.0	-1210794.0	1525.0
251.149	687.2	-370.1	-8203.3	386398.0	-383758.4	240.0
251.150	-1621.5	131.4	8952.2	-157828.0	3390869.0	-10551.0
251.151	-2125.2	112.9	8230.4	-139694.0	4216156.0	-11835.0
251.152	1433.0	-682.2	-8373.1	698891.0	-1602663.0	1078.0
251.153	927.8	-680.4	-9091.5	695450.0	-773756.3	-208.0

251.154	-1373.7	-142.9	8109.4	133394.0	2988699.0	-10982.0
251.155	-1877.5	-161.3	7387.6	151329.0	3813960.0	-12266.0
251.156	1009.3	-40.6	-3645.3	85639.0	-912092.0	-215.0
251.157	504.0	-38.7	-4363.6	82106.0	-83768.8	-1502.0
251.158	-1414.3	-108.9	4429.2	52375.0	3051404.0	-8708.0
251.159	-1917.9	-127.4	3707.7	70546.0	3876717.0	-9991.0
251.160	1233.0	-321.8	-3817.4	366423.0	-1274373.0	-742.0
251.161	727.7	-319.9	-4535.7	362888.0	-446327.6	-2028.0
251.162	-1186.8	-406.8	4286.1	360951.0	2682087.0	-9225.0
251.163	-1690.4	-425.3	3564.3	379094.0	3507399.0	-10508.0
251.164	1001.1	-31.7	-3287.6	77525.0	-898171.1	-253.0
251.165	496.1	-29.6	-4005.9	74272.0	-70725.8	-1539.0
251.166	-1424.1	-115.4	4780.1	55697.0	3066920.0	-8751.0
251.167	-1927.8	-134.0	4060.2	74002.0	3893206.0	-10035.0
251.168	1241.0	-332.1	-4174.8	376796.0	-1287344.0	-705.0
251.169	735.7	-330.2	-4893.2	373260.0	-459428.3	-1992.0
251.170	-1176.3	-399.7	3935.2	357036.0	2664749.0	-9180.0
251.171	-1680.1	-418.0	3213.4	374952.0	3491011.0	-10464.0
251.268	804.8	-177.7	-1229.4	179726.0	-580111.9	-1140.0
251.269	-877.9	-183.7	-3638.1	178605.0	2178409.0	-5423.0
251.270	-40.2	-1.8	3691.0	-13140.0	801936.3	-4762.0
251.271	-1719.3	-61.9	1286.9	44745.0	3554072.0	-9042.0
251.272	1030.0	-460.9	-1402.0	462677.0	-944843.4	-1661.0
251.273	-653.3	-456.1	-3797.4	453724.0	1814356.0	-5947.0
251.274	187.4	-294.8	3548.7	289687.0	432895.3	-5280.0
251.275	-1492.2	-354.6	1142.7	347375.0	3185653.0	-9562.0
251.276	747.8	-76.0	29.4	86550.0	-486690.3	-1672.0
251.277	-936.2	-70.1	-2374.0	74743.0	2273627.0	-5959.0
251.278	19.1	-76.8	2439.6	52300.0	704657.8	-4222.0
251.279	-1661.0	-129.9	43.7	103068.0	3458854.0	-8505.0
251.280	972.4	-355.9	-142.5	366051.0	-850447.9	-2196.0
251.281	-710.8	-350.5	-2533.7	357664.0	1907777.0	-6482.0
251.282	246.6	-371.9	2296.4	356788.0	335944.4	-4739.0
251.283	-1433.0	-430.9	-113.4	413747.0	3088663.0	-9021.0
251.284	795.9	-166.4	-872.2	168873.0	-565539.6	-1180.0
251.285	-886.8	-175.3	-3283.0	170253.0	2193152.0	-5463.0
251.286	-48.8	-17.4	4041.2	2922.0	816005.8	-4802.0
251.287	-1728.4	-73.2	1639.3	55304.0	3569764.0	-9083.0
251.288	1038.9	-471.8	-1759.7	475345.0	-959586.9	-1621.0
251.289	-643.7	-464.2	-4154.7	464833.0	1797790.0	-5907.0
251.290	197.2	-283.8	3199.4	282346.0	416917.0	-5239.0
251.291	-1482.6	-342.7	793.4	338847.0	3170087.0	-9521.0
251.292	738.3	-65.0	386.3	75848.0	-471198.1	-1715.0
251.293	-944.7	-72.1	-2022.3	76415.0	2287471.0	-5999.0
251.294	10.1	-91.0	2795.0	66950.0	719591.9	-4262.0
251.295	-1670.1	-136.7	395.7	109466.0	3473546.0	-8546.0
251.296	981.4	-367.1	-500.3	379223.0	-865166.0	-2156.0
251.297	-701.3	-359.6	-2892.6	369591.0	1892185.0	-6441.0
251.298	256.3	-360.8	1947.0	349319.0	319956.9	-4698.0
251.299	-1423.9	-423.6	-455.9	409793.0	3073970.0	-8980.0
252.1	-317.2	239.2	-42.0	-232256.0	1488574.0	4236.0
252.2	-2068.5	265.5	-46.5	-256574.0	4359532.0	4162.0
252.3	-566.5	410.6	-70.1	-397849.0	1883364.0	9489.0
252.4	-2317.8	436.8	-74.5	-422121.0	4754322.0	9414.0
252.5	-242.5	184.8	-32.6	-179428.0	1142514.0	3257.0
252.6	-1993.8	211.0	-37.0	-203740.0	4013472.0	3182.0
252.7	-491.9	356.1	-60.6	-345046.0	1537279.0	8509.0
252.8	-2243.2	382.3	-65.0	-369313.0	4408237.0	8435.0
252.9	-3819.8	291.8	-50.9	-280900.0	7229490.0	4087.0
252.10	-491.7	359.1	-61.7	-348158.0	1765330.0	7913.0

252.11	-3994.3	411.6	-70.5	-396724.0	7506246.0	7764.0
252.12	-3745.2	237.3	-41.4	-228029.0	6884405.0	3108.0
252.13	-417.1	304.7	-52.2	-295339.0	1419244.0	6933.0
252.14	-3919.7	357.1	-61.0	-343778.0	7160160.0	6784.0
252.15	-2243.0	385.4	-66.1	-372453.0	4635288.0	7838.0
252.16	-2168.4	330.9	-56.6	-319640.0	4289203.0	6859.0
252.17	470.8	226.9	-39.9	-220817.0	197055.3	4275.0
252.18	-1280.5	253.2	-44.4	-245169.0	3067329.0	4200.0
252.19	221.5	398.3	-68.0	-386425.0	591727.4	9527.0
252.20	-1529.8	424.5	-72.4	-410746.0	3462119.0	9452.0
252.21	545.4	172.5	-30.5	-167966.0	-148846.8	3295.0
252.22	-1205.8	198.8	-34.9	-192348.0	2721269.0	3221.0
252.23	296.1	343.9	-58.5	-333631.0	245838.2	8547.0
252.24	-1455.2	370.1	-62.9	-357916.0	3116034.0	8473.0
252.25	-3031.8	279.5	-48.8	-269475.0	5938287.0	4126.0
252.26	296.3	346.9	-59.6	-336768.0	473309.9	7951.0
252.27	-3206.3	399.4	-68.4	-385353.0	6214043.0	7802.0
252.28	-2957.2	225.1	-39.3	-216650.0	5592202.0	3146.0
252.29	370.9	292.5	-50.1	-283961.0	127411.7	6972.0
252.30	-3131.7	344.9	-58.9	-332494.0	5868958.0	6823.0
252.31	996.1	218.7	-38.5	-213137.0	-664015.8	4300.0
252.32	-755.1	245.1	-43.0	-237576.0	2206544.0	4226.0
252.33	821.6	338.7	-58.2	-329178.0	-387774.3	7977.0
252.34	-929.7	365.0	-62.6	-353469.0	2483275.0	7902.0
252.35	1070.8	164.2	-29.1	-160241.0	-1009499.0	3321.0
252.36	-680.5	190.6	-33.5	-184752.0	1860459.0	3246.0
252.37	896.3	284.3	-48.7	-276377.0	-733648.1	6997.0
252.38	-855.0	310.5	-53.1	-300688.0	2137215.0	6923.0
252.39	-1455.0	373.1	-64.0	-361065.0	3344085.0	7877.0
252.40	-1380.4	318.7	-54.5	-308254.0	2998000.0	6897.0
252.41	-632.4	244.1	-42.9	-236822.0	2005655.0	4221.0
252.42	-2383.7	270.4	-47.3	-261128.0	4875613.0	4147.0
252.43	-881.7	415.5	-70.9	-402421.0	2400445.0	9473.0
252.44	-2633.0	441.7	-75.3	-426686.0	5270403.0	9399.0
252.45	-557.7	189.7	-33.4	-183993.0	1659595.0	3242.0
252.46	-2309.0	215.9	-37.8	-208284.0	4529553.0	3167.0
252.47	-807.1	361.0	-61.4	-349601.0	2054360.0	8494.0
252.48	-2558.4	387.2	-65.8	-373845.0	4924318.0	8419.0
252.49	-4135.0	296.7	-51.7	-285422.0	7746571.0	4072.0
252.50	-806.9	364.0	-62.5	-352715.0	2281411.0	7898.0
252.51	-4309.5	416.5	-71.3	-401240.0	8022327.0	7749.0
252.52	-4060.4	242.2	-42.3	-232570.0	7400486.0	3093.0
252.53	-732.2	309.6	-53.0	-299929.0	1935351.0	6918.0
252.54	-4234.9	361.9	-61.9	-348312.0	7677242.0	6769.0
252.55	-2558.2	390.3	-66.9	-377014.0	5152369.0	7823.0
252.56	-2483.6	335.8	-57.4	-324191.0	4806283.0	6844.0
252.57	-842.5	247.4	-43.4	-239864.0	2349384.0	4211.0
252.58	-2593.8	273.7	-47.8	-264162.0	5220342.0	4136.0
252.59	-1017.0	367.3	-63.1	-355753.0	2626140.0	7887.0
252.60	-2768.3	393.6	-67.5	-380058.0	5496098.0	7813.0
252.61	-767.9	192.9	-33.9	-187035.0	2004299.0	3231.0
252.62	-2519.2	219.2	-38.4	-211322.0	4874257.0	3157.0
252.63	-942.4	312.9	-53.6	-302971.0	2280055.0	6908.0
252.64	-2693.7	339.1	-58.0	-327219.0	5151013.0	6833.0
252.108	701.8	692.7	-1293.3	-694730.0	-403620.6	4318.0
252.109	215.9	688.9	-2020.7	-690412.0	392793.5	5598.0
252.110	-16.1	734.6	1143.7	-725148.0	770205.8	6857.0
252.111	-501.7	750.5	413.1	-740855.0	1565794.0	8138.0
252.112	-187.4	-208.0	-507.0	221301.0	1042485.0	2607.0
252.113	-673.9	-229.4	-1228.2	242347.0	1840133.0	3887.0



252.114	-910.5	-215.6	1904.1	253794.0	2225143.0	5151.0
252.115	-1395.7	-202.7	1173.1	241410.0	3020120.0	6431.0
252.116	758.9	803.7	-2560.0	-798164.0	-497106.9	3786.0
252.117	273.1	801.9	-3287.6	-796047.0	299127.5	5066.0
252.118	-74.8	652.4	2403.1	-652176.0	866382.5	7396.0
252.119	-560.4	666.5	1672.8	-665963.0	1661911.0	8677.0
252.120	-130.3	-103.1	-1772.4	124030.0	949133.4	2075.0
252.121	-616.2	-104.1	-2500.8	125937.0	1745763.0	3355.0
252.122	-967.3	-291.2	3139.7	320874.0	2317741.0	5684.0
252.123	-1452.5	-273.9	2410.7	304130.0	3113719.0	6964.0
252.124	622.8	779.4	-2626.5	-785190.0	-272361.1	4192.0
252.125	137.2	778.7	-3354.7	-783772.0	523635.1	5471.0
252.126	-93.7	766.0	-182.7	-761820.0	899246.4	6725.0
252.127	-579.2	781.1	-913.0	-776733.0	1695144.0	8006.0
252.128	-117.8	-333.1	840.8	360741.0	926585.8	2759.0
252.129	-603.1	-322.8	110.0	351120.0	1722084.0	4039.0
252.130	-839.7	-260.7	3231.1	313692.0	2107094.0	5305.0
252.131	-1324.9	-247.0	2500.0	300474.0	2902072.0	6585.0
252.132	681.7	895.6	-3909.2	-893350.0	-368737.0	3656.0
252.133	195.9	888.5	-4636.3	-885668.0	427404.4	4937.0
252.134	-152.3	679.2	1077.4	-683923.0	995384.4	7265.0
252.135	-637.8	692.8	347.2	-697236.0	1791286.0	8546.0
252.136	-59.3	-199.0	-434.5	235990.0	830764.4	2226.0
252.137	-544.9	-202.1	-1161.2	239871.0	1626841.0	3505.0
252.138	-897.3	-321.4	4487.2	365712.0	2201490.0	5837.0
252.139	-1382.5	-308.3	3756.4	353100.0	2996467.0	7117.0
252.140	1232.2	332.5	-3810.9	-356052.0	-1273576.0	772.0
252.141	746.5	328.0	-4538.1	-351584.0	-477580.9	2051.0
252.142	-1168.1	408.0	4205.4	-362767.0	2650828.0	9244.0
252.143	-1653.5	424.6	3474.5	-378337.0	3446755.0	10524.0
252.144	967.6	49.8	-3562.0	-73756.0	-843665.1	254.0
252.145	482.0	45.3	-4289.2	-69304.0	-47315.9	1534.0
252.146	-1437.0	124.8	4424.8	-68420.0	3088649.0	8733.0
252.147	-1922.5	141.4	3694.4	-84038.0	3884550.0	10013.0
252.148	1208.8	360.8	-4215.8	-385107.0	-1234509.0	733.0
252.149	722.9	356.2	-4943.0	-380046.0	-438255.7	2013.0
252.150	-1189.0	418.8	3809.2	-378419.0	2686529.0	9198.0
252.151	-1674.6	435.3	3078.3	-393920.0	3482405.0	10478.0
252.152	990.7	19.2	-3156.6	-42392.0	-881808.0	295.0
252.153	505.3	15.1	-3883.9	-38313.0	-86068.2	1574.0
252.154	-1415.6	114.1	4821.3	-52806.0	3053075.0	8778.0
252.155	-1901.1	131.0	4092.7	-68835.0	3848976.0	10058.0
252.156	1421.6	696.2	-8032.2	-694647.0	-1583553.0	-999.0
252.157	936.3	692.2	-8759.5	-690653.0	-788601.1	279.0
252.158	-1363.1	134.5	8402.0	-119430.0	2970386.0	11034.0
252.159	-1848.7	151.0	7671.2	-134847.0	3766262.0	12315.0
252.160	1157.4	410.3	-7783.2	-409151.0	-1154541.0	-1517.0
252.161	672.1	406.3	-8510.5	-405159.0	-358710.0	-239.0
252.162	-1632.0	-144.2	8620.5	170394.0	3408206.0	10523.0
252.163	-2117.7	-127.7	7889.6	154976.0	4204057.0	11804.0
252.164	1397.9	727.3	-8437.3	-726329.0	-1544563.0	-1038.0
252.165	912.3	723.2	-9164.6	-721683.0	-748424.3	241.0
252.166	-1384.4	141.7	8006.6	-131517.0	3005985.0	10990.0
252.167	-1870.0	158.2	7275.8	-146953.0	3801861.0	12271.0
252.168	1181.3	377.9	-7377.8	-376004.0	-1193481.0	-1478.0
252.169	695.9	374.0	-8105.2	-372011.0	-398371.6	-199.0
252.170	-1611.4	-153.1	9016.4	184213.0	3373430.0	10569.0
252.171	-2096.8	-136.5	8285.5	168615.0	4169356.0	11850.0
252.268	959.0	372.4	-155.5	-374878.0	-828845.5	2220.0
252.269	-660.3	359.2	-2576.0	-361065.0	1824581.0	6487.0

252.270	240.1	381.8	2256.5	-366891.0	346353.3	4759.0
252.271	-1378.0	432.5	-180.9	-415259.0	2998608.0	9027.0
252.272	693.5	89.6	93.2	-91829.0	-397336.1	1705.0
252.273	-926.5	79.4	-2340.8	-78284.0	2258086.0	5972.0
252.274	-28.8	97.2	2477.4	-71996.0	783694.8	4248.0
252.275	-1647.3	146.7	49.4	-119455.0	3436327.0	8517.0
252.276	1015.5	482.2	-1421.9	-477119.0	-921519.9	1690.0
252.277	-603.4	468.1	-3846.9	-461266.0	1732008.0	5955.0
252.278	181.3	298.7	3515.5	-292437.0	442739.6	5297.0
252.279	-1436.5	350.3	1080.9	-342183.0	3094776.0	9565.0
252.280	750.7	197.1	-1173.1	-191835.0	-490962.0	1173.0
252.281	-868.8	196.1	-3610.9	-186175.0	2163716.0	5438.0
252.282	-87.4	17.1	3735.3	-974.0	879799.7	4786.0
252.283	-1705.1	73.0	1300.9	-54317.0	3531672.0	9052.0
252.284	935.8	400.4	-560.6	-403890.0	-790727.9	2181.0
252.285	-683.7	382.3	-2980.5	-385022.0	1863648.0	6448.0
252.286	217.0	389.7	1859.0	-376207.0	384760.3	4718.0
252.287	-1400.7	444.7	-572.3	-430470.0	3036853.0	8985.0
252.288	715.9	58.4	497.4	-57806.0	-434547.6	1748.0
252.289	-904.8	62.9	-1942.7	-56761.0	2221588.0	6017.0
252.290	-7.7	86.4	2878.6	-56394.0	748579.6	4294.0
252.291	-1626.0	131.4	447.8	-99608.0	3400728.0	8564.0
252.292	992.8	511.3	-1827.0	-507208.0	-884275.6	1649.0
252.293	-626.6	492.9	-4250.8	-487073.0	1770126.0	5917.0
252.294	158.4	306.9	3118.2	-302207.0	480729.3	5256.0
252.295	-1459.2	359.4	683.7	-353898.0	3132020.0	9524.0
252.296	772.9	165.9	-768.7	-157549.0	-527980.3	1216.0
252.297	-847.5	168.1	-3209.4	-153352.0	2128117.0	5483.0
252.298	-66.0	6.0	4131.9	15125.0	844126.8	4831.0
252.299	-1683.6	63.3	1699.4	-40309.0	3495123.0	9097.0
253.1	966.7	-2.5	-178.1	4449.0	-611163.3	5283.0
253.2	964.9	-1.8	-170.3	3333.0	-604842.6	9807.0
253.3	457.7	-8.8	-234.8	12890.0	208277.8	5666.0
253.4	455.9	-8.3	-231.5	11914.0	214566.5	10190.0
253.5	745.3	-2.1	-143.0	3583.0	-472936.2	4062.0
253.6	743.5	-1.3	-135.0	2444.0	-466620.6	8586.0
253.7	236.3	-8.5	-199.0	12064.0	346499.9	4445.0
253.8	234.6	-7.8	-197.2	10979.0	352800.8	8969.0
253.9	963.1	-1.0	-168.0	2126.0	-598571.1	14331.0
253.10	610.4	-6.9	-218.5	10311.0	-37537.1	5551.0
253.11	606.9	-5.5	-213.6	8047.0	-24989.5	14599.0
253.12	741.8	-0.6	-135.3	1261.0	-460331.6	13110.0
253.13	389.0	-6.5	-182.6	9495.0	100685.0	4330.0
253.14	385.5	-5.2	-180.1	7326.0	113228.5	13378.0
253.15	608.6	-6.3	-214.1	9327.0	-31253.5	10075.0
253.16	387.2	-5.9	-178.8	8398.0	106959.6	8854.0
253.17	966.8	-2.7	-182.0	4856.0	-612857.9	3247.0
253.18	965.0	-2.1	-172.1	3808.0	-606510.3	7772.0
253.19	457.8	-9.1	-236.6	13325.0	206608.2	3630.0
253.20	456.0	-8.6	-230.1	12369.0	212912.8	8154.0
253.21	745.4	-2.4	-147.4	4042.0	-474629.8	2026.0
253.22	743.6	-1.6	-136.5	2907.0	-468285.2	6551.0
253.23	236.4	-8.7	-203.2	12520.0	344823.2	2409.0
253.24	234.6	-8.2	-195.3	11546.0	351130.8	6933.0
253.25	963.2	-1.3	-166.8	2634.0	-600222.6	12296.0
253.26	610.5	-7.0	-221.0	10624.0	-39213.7	3515.0
253.27	606.9	-5.8	-211.7	8537.0	-26656.5	12563.0
253.28	741.8	-0.8	-132.7	1704.0	-462007.6	11075.0
253.29	389.1	-6.6	-185.0	9822.0	99011.3	2294.0
253.30	385.6	-5.4	-177.7	7667.0	111579.9	11342.0

253.31	966.8	-3.0	-185.1	5235.0	-613998.8	1890.0
253.32	965.0	-2.3	-173.6	4100.0	-607643.3	6415.0
253.33	610.5	-7.0	-222.6	10847.0	-40340.7	2158.0
253.34	608.7	-6.7	-213.6	10029.0	-34031.1	6682.0
253.35	745.5	-2.7	-151.6	4491.0	-475750.5	669.0
253.36	743.7	-1.8	-138.2	3219.0	-469391.8	5194.0
253.37	389.1	-6.7	-186.4	10043.0	97886.3	937.0
253.38	387.4	-6.3	-177.8	9122.0	104213.3	5461.0
253.39	608.7	-6.6	-213.8	9785.0	-32908.1	8039.0
253.40	387.3	-6.2	-178.1	8919.0	105313.9	6818.0
253.41	966.6	-2.4	-177.6	4289.0	-610504.6	6097.0
253.42	964.9	-1.7	-169.8	3155.0	-604167.6	10622.0
253.43	457.6	-8.8	-233.8	12733.0	208933.5	6480.0
253.44	455.9	-8.1	-232.0	11682.0	215231.4	11004.0
253.45	745.3	-2.0	-142.4	3422.0	-472252.2	4876.0
253.46	743.5	-1.2	-134.9	2276.0	-465945.6	9401.0
253.47	236.3	-8.4	-198.8	11915.0	347175.9	5259.0
253.48	234.5	-7.7	-197.6	10803.0	353443.5	9783.0
253.49	963.1	-0.9	-168.7	2014.0	-597897.0	15146.0
253.50	610.3	-6.8	-217.8	10183.0	-36884.4	6365.0
253.51	606.8	-5.4	-214.4	7916.0	-24343.9	15413.0
253.52	741.7	-0.5	-135.7	1105.0	-459684.0	13925.0
253.53	389.0	-6.4	-181.8	9286.0	101361.0	5144.0
253.54	385.5	-5.1	-180.9	7184.0	113901.5	14192.0
253.55	608.6	-6.2	-214.4	9110.0	-30586.5	10889.0
253.56	387.2	-5.7	-179.4	8189.0	107625.6	9668.0
253.57	966.6	-2.4	-177.5	4182.0	-610048.6	6640.0
253.58	964.8	-1.6	-169.8	3042.0	-603742.9	11164.0
253.59	610.3	-6.8	-217.6	10094.0	-36433.4	6908.0
253.60	608.6	-6.1	-214.7	8956.0	-30143.5	11432.0
253.61	745.2	-1.9	-142.2	3309.0	-471822.6	5419.0
253.62	743.5	-1.2	-135.6	2153.0	-465499.6	9943.0
253.63	388.9	-6.3	-181.6	9187.0	101786.6	5687.0
253.64	387.2	-5.6	-179.7	8063.0	108070.6	10211.0
253.108	690.5	477.2	-1151.6	-486401.0	-389826.7	-2367.0
253.109	199.5	444.1	-669.8	-454930.0	413251.2	443.0
253.110	-80.7	223.7	647.9	-232963.0	871485.4	1276.0
253.111	-570.8	193.6	1126.2	-204142.0	1673274.0	4084.0
253.112	1652.4	-123.4	-3296.4	147518.0	-1960034.0	4353.0
253.113	1161.1	-141.4	-3165.1	165483.0	-1156603.0	7164.0
253.114	882.0	-327.6	-5856.7	362107.0	-700303.9	7997.0
253.115	391.4	-343.5	-5772.5	377734.0	102099.5	10806.0
253.116	629.7	603.0	-1629.5	-599298.0	-290251.6	-2228.0
253.117	138.1	573.1	-1148.3	-571237.0	513942.3	584.0
253.118	-20.2	175.9	1104.7	-199735.0	772296.3	1138.0
253.119	-510.4	141.3	1583.4	-166189.0	1574588.0	3946.0
253.120	1591.7	11.4	-3051.7	25219.0	-1860424.0	4492.0
253.121	1100.4	-5.2	-2921.5	41674.0	-1056994.0	7302.0
253.122	944.4	-396.3	-5599.1	417595.0	-802547.4	7853.0
253.123	453.9	-415.5	-5549.7	436604.0	-356.7	10661.0
253.124	646.6	-37.5	-1009.5	12765.0	-317992.6	-2350.0
253.125	155.6	-74.2	-526.7	47918.0	485114.4	459.0
253.126	-125.0	-308.1	825.1	282899.0	943965.3	1293.0
253.127	-615.9	-336.4	1301.7	309139.0	1746839.0	4102.0
253.128	1697.9	574.6	-3022.0	-518780.0	-2034498.0	4337.0
253.129	1206.5	560.6	-2863.4	-505119.0	-1231092.0	7147.0
253.130	926.8	408.8	-5652.6	-343171.0	-774009.9	7983.0
253.131	436.2	393.4	-5551.9	-328147.0	28813.5	10792.0
253.132	584.9	87.2	-1486.7	-99485.0	-216852.6	-2209.0
253.133	93.5	49.4	-1004.2	-63303.0	586896.9	601.0

253.134	-64.2	-372.6	1284.0	334240.0	844305.1	1154.0
253.135	-554.5	-408.2	1762.0	368791.0	1646407.0	3962.0
253.136	1634.8	713.7	-2789.3	-647221.0	-1931497.0	4482.0
253.137	1144.1	693.8	-2651.4	-627165.0	-1128914.0	7290.0
253.138	988.8	326.4	-5438.4	-273691.0	-875289.8	7840.0
253.139	498.5	310.1	-5361.2	-257672.0	-73372.3	10648.0
253.140	1929.0	481.3	-3297.1	-478938.0	-2414902.0	-4270.0
253.141	1437.7	450.6	-2812.3	-450817.0	-1611471.0	-1460.0
253.142	-648.2	-295.4	-4659.6	306831.0	1800649.0	7898.0
253.143	-1138.4	-317.3	-4748.5	329331.0	2602359.0	10705.0
253.144	2215.6	273.3	-3303.6	-265116.0	-2882235.0	-2249.0
253.145	1724.3	242.6	-2818.7	-237034.0	-2078804.0	561.0
253.146	-358.3	-431.4	-6997.7	459947.0	1327153.0	9911.0
253.147	-848.5	-453.5	-7086.8	482563.0	2128863.0	12719.0
253.148	1916.2	325.3	-3255.1	-327224.0	-2393148.0	-4266.0
253.149	1425.2	293.3	-2773.3	-296830.0	-1590641.0	-1457.0
253.150	-662.6	-502.0	-4758.1	504767.0	1823998.0	7905.0
253.151	-1152.6	-526.5	-4827.6	529231.0	2625758.0	10712.0
253.152	2228.3	424.0	-3337.1	-413721.0	-2903015.0	-2253.0
253.153	1736.8	396.5	-2856.2	-388046.0	-2099635.0	558.0
253.154	-344.4	-216.8	-6936.8	255493.0	1304677.0	9906.0
253.155	-834.6	-238.5	-7002.9	277585.0	2106387.0	12713.0
253.156	1727.4	898.2	-4872.3	-856655.9	-2084018.0	-3809.0
253.157	1235.8	872.2	-4393.1	-832138.9	-1279663.0	-998.0
253.158	-440.7	-511.2	-3649.0	480444.0	1460261.0	7420.0
253.159	-930.6	-536.3	-3709.8	505355.0	2262046.0	10227.0
253.160	2013.7	699.4	-4882.2	-651645.0	-2551426.0	-1788.0
253.161	1522.1	673.4	-4403.0	-627129.0	-1747072.0	1024.0
253.162	-150.9	-653.9	-6079.9	640933.0	987739.3	9434.0
253.163	-640.8	-679.1	-6141.3	665967.0	1788525.0	12241.0
253.164	1714.9	733.8	-4828.5	-696401.0	-2063187.0	-3806.0
253.165	1223.6	706.8	-4352.4	-669938.0	-1259756.0	-996.0
253.166	-454.5	-718.7	-3632.6	677375.0	1482762.0	7426.0
253.167	-944.6	-743.3	-3690.4	701617.0	2284497.0	10233.0
253.168	2025.8	864.8	-4927.5	-812902.0	-2571359.0	-1789.0
253.169	1534.1	838.8	-4448.3	-788387.0	-1767029.0	1022.0
253.170	-136.3	-453.6	-5993.2	448922.0	963519.1	9426.0
253.171	-626.5	-475.6	-6077.5	471404.0	1765151.0	12234.0
253.268	1601.2	262.2	-1719.8	-260516.0	-1878016.0	-3297.0
253.269	-35.9	157.9	-115.2	-161509.0	799272.6	6069.0
253.270	826.7	8.1	-479.1	-7166.0	-611813.3	356.0
253.271	-806.9	-87.0	-826.6	85700.0	2060411.0	9713.0
253.272	1889.0	45.9	-1722.1	-38147.0	-2348044.0	-1280.0
253.273	251.1	-27.5	-126.7	32724.0	330554.4	8089.0
253.274	1116.6	-149.3	-3011.5	164931.0	-1084886.0	2369.0
253.275	-517.6	-212.1	-3019.3	227752.0	1587763.0	11728.0
253.276	1541.0	381.3	-2188.1	-368541.0	-1780280.0	-3160.0
253.277	-97.4	283.3	-594.4	-273669.0	899957.3	6210.0
253.278	889.3	-53.8	-59.2	41994.0	-714321.0	212.0
253.279	-745.4	-156.9	-540.8	141878.0	1960004.0	9572.0
253.280	1828.3	178.0	-2199.0	-157803.0	-2248435.0	-1141.0
253.281	190.6	107.8	-603.5	-89955.0	429892.6	8227.0
253.282	1179.1	-219.9	-2714.8	222434.0	-1187039.0	2225.0
253.283	-455.1	-291.0	-2818.9	294056.0	1485609.0	11584.0
253.284	1588.1	107.0	-1676.8	-110115.0	-1857337.0	-3293.0
253.285	-49.1	1.0	-71.6	-9280.0	820898.8	6074.0
253.286	814.0	-164.5	12.7	160715.0	-590973.3	359.0
253.287	-820.2	-272.0	-437.5	263402.0	2082038.0	9717.0
253.288	1902.0	236.6	-1770.9	-221675.0	-2369748.0	-1284.0
253.289	264.7	187.5	-179.4	-172739.0	308371.7	8084.0

253.290	1130.3	65.2	-3040.4	-39549.0	-1107412.0	2364.0
253.291	-504.1	8.1	-2956.7	16949.0	1566186.0	11724.0
253.292	1527.3	234.0	-2154.9	-224149.0	-1757753.0	-3154.0
253.293	-110.2	121.5	-548.1	-116880.0	921041.8	6214.0
253.294	876.1	-224.3	445.0	207030.0	-692679.9	216.0
253.295	-758.7	-336.0	-115.7	314644.0	1981632.0	9577.0
253.296	1841.3	371.1	-2247.9	-343384.0	-2270138.0	-1145.0
253.297	204.0	317.8	-654.2	-290602.0	407917.2	8223.0
253.298	1192.7	-4.8	-2754.0	17424.0	-1209591.0	2220.0
253.299	-442.0	-68.1	-2720.0	79943.0	1463931.0	11580.0
254.1	4427.4	-204.7	10.0	176782.0	-6285433.0	-13725.0
254.2	6650.2	-217.9	13.4	185569.0	-9943841.0	-22543.0
254.3	4793.3	-347.6	17.8	297319.0	-6883659.0	-18334.0
254.4	7016.0	-360.7	21.2	305988.0	-10541090.0	-27152.0
254.5	3404.4	-159.3	7.6	137845.0	-4832815.0	-10555.0
254.6	5627.2	-172.5	11.0	146631.0	-8486223.0	-19372.0
254.7	3770.3	-302.2	15.4	258378.0	-5431041.0	-15164.0
254.8	5993.1	-315.3	18.8	267006.0	-9080449.0	-23981.0
254.9	8872.9	-231.0	16.8	194232.0	-13590280.0	-31360.0
254.10	4683.5	-304.7	15.5	261136.0	-6704499.0	-16951.0
254.11	9129.0	-330.9	22.2	278456.0	-14015340.0	-34587.0
254.12	7849.9	-185.6	14.4	155228.0	-12139660.0	-28190.0
254.13	3660.5	-259.3	13.1	222206.0	-5251880.0	-13781.0
254.14	8106.0	-285.5	19.9	239496.0	-12554720.0	-31416.0
254.15	6906.3	-317.9	18.9	269850.0	-10358910.0	-25769.0
254.16	5883.3	-272.5	16.5	230889.0	-8908289.0	-22598.0
254.17	3427.4	-198.1	8.4	172230.0	-4641983.0	-9761.0
254.18	5650.2	-211.3	11.9	181014.0	-8295392.0	-18578.0
254.19	3793.3	-341.0	16.2	292779.0	-5240209.0	-14370.0
254.20	6016.0	-354.2	19.7	301514.0	-8894643.0	-23187.0
254.21	2404.4	-152.7	6.0	133283.0	-3189365.0	-6590.0
254.22	4627.2	-166.0	9.5	142079.0	-6842774.0	-15407.0
254.23	2770.3	-295.5	13.9	253782.0	-3787591.0	-11199.0
254.24	4993.1	-308.8	17.3	262556.0	-7440999.0	-20017.0
254.25	7872.9	-224.6	15.3	189770.0	-11953830.0	-27396.0
254.26	3683.5	-298.1	13.9	256586.0	-5061049.0	-12987.0
254.27	8129.0	-324.5	20.7	273996.0	-12368890.0	-30622.0
254.28	6849.9	-179.1	12.9	150789.0	-10493210.0	-24225.0
254.29	2660.5	-252.7	11.5	217652.0	-3608430.0	-9816.0
254.30	7106.0	-279.0	18.3	235023.0	-10918270.0	-27451.0
254.31	2760.7	-193.7	7.4	169183.0	-3546025.0	-7117.0
254.32	4983.5	-207.0	10.8	177973.0	-7199434.0	-15935.0
254.33	3016.9	-293.7	12.9	253543.0	-3965065.0	-10344.0
254.34	5239.6	-307.0	16.3	262344.0	-7618499.0	-19161.0
254.35	1737.8	-148.3	5.0	130251.0	-2093381.0	-3947.0
254.36	3960.5	-161.6	8.5	139039.0	-5746815.0	-12764.0
254.37	1993.9	-248.3	10.5	214606.0	-2512447.0	-7173.0
254.38	4216.6	-261.6	13.9	223402.0	-6165881.0	-15991.0
254.39	5906.3	-311.3	17.3	265347.0	-8712458.0	-21804.0
254.40	4883.3	-266.0	15.0	226405.0	-7261839.0	-18634.0
254.41	4827.4	-207.3	10.6	178588.0	-6943013.0	-15311.0
254.42	7050.2	-220.6	14.0	187389.0	-10592420.0	-24129.0
254.43	5193.3	-350.2	18.4	299125.0	-7541239.0	-19920.0
254.44	7416.0	-363.3	21.8	307773.0	-11199670.0	-28738.0
254.45	3804.4	-161.9	8.2	139651.0	-5490395.0	-12140.0
254.46	6027.2	-175.2	11.7	148445.0	-9141803.0	-20958.0
254.47	4170.3	-304.8	16.0	260184.0	-6088621.0	-16749.0
254.48	6393.1	-317.9	19.4	268805.0	-9739030.0	-25567.0
254.49	9272.9	-233.6	17.4	196028.0	-14248860.0	-32946.0
254.50	5083.5	-307.3	16.1	262951.0	-7362079.0	-18537.0



254.51	9529.0	-333.5	22.9	280248.0	-14673920.0	-36172.0
254.52	8249.9	-188.2	15.0	157019.0	-12798240.0	-29775.0
254.53	4060.5	-261.9	13.7	224015.0	-5909460.0	-15367.0
254.54	8506.0	-288.1	20.5	241279.0	-13213300.0	-33002.0
254.55	7306.3	-320.5	19.5	271642.0	-11017490.0	-27355.0
254.56	6283.3	-275.1	17.1	232677.0	-9566870.0	-24184.0
254.57	5094.1	-209.0	11.0	179790.0	-7381391.0	-16368.0
254.58	7316.8	-222.3	14.4	188597.0	-11034830.0	-25186.0
254.59	5350.2	-309.0	16.5	264159.0	-7800457.0	-19595.0
254.60	7572.9	-322.2	19.9	272832.0	-11449890.0	-28412.0
254.61	4071.1	-163.7	8.6	140853.0	-5928773.0	-13198.0
254.62	6293.8	-176.9	12.1	149638.0	-9584207.0	-22015.0
254.63	4327.2	-263.7	14.1	225218.0	-6347839.0	-16424.0
254.64	6550.0	-276.8	17.5	233871.0	-9999248.0	-25241.0
254.108	3885.3	1674.6	-1955.3	-1556000.0	-5622882.0	-15439.0
254.109	4448.1	1503.2	-1496.7	-1406000.0	-6547185.0	-16746.0
254.110	4596.9	-587.2	2016.8	485298.0	-6790456.0	-18039.0
254.111	5159.3	-770.7	2478.1	647576.0	-7713860.0	-19346.0
254.112	1940.3	179.2	-2445.5	-123627.0	-2428037.0	-5447.0
254.113	2503.1	5.0	-1988.4	28981.0	-3352339.0	-6754.0
254.114	2650.8	-1879.9	1579.0	1752000.0	-3592890.0	-8046.0
254.115	3213.3	-2069.0	2040.7	1919000.0	-4516268.0	-9353.0
254.116	3939.3	1151.3	-747.3	-1075000.0	-5711191.0	-15629.0
254.117	4502.2	971.3	-309.9	-918799.0	-6635467.0	-16937.0
254.118	4543.1	25.3	796.3	-80345.0	-6702097.0	-17849.0
254.119	5105.4	-159.6	1257.7	83092.0	-7625526.0	-19155.0
254.120	1994.3	-342.0	-1239.3	355131.0	-2516345.0	-5637.0
254.121	2557.1	-516.8	-782.3	508299.0	-3440647.0	-6945.0
254.122	2597.0	-1330.6	365.2	1244000.0	-3505531.0	-7856.0
254.123	3159.5	-1520.3	827.1	1412000.0	-4428909.0	-9163.0
254.124	3862.9	1401.9	-1016.2	-1275000.0	-5586562.0	-15405.0
254.125	4425.8	1229.0	-560.4	-1124000.0	-6510839.0	-16713.0
254.126	4575.3	-854.9	2978.6	766644.0	-6754933.0	-18007.0
254.127	5137.7	-1017.9	3437.3	909938.0	-7678336.0	-19314.0
254.128	1960.9	448.5	-3369.7	-388631.0	-2461814.0	-5479.0
254.129	2523.5	274.3	-2912.9	-236017.0	-3385167.0	-6785.0
254.130	2671.1	-1564.3	614.4	1442000.0	-3626743.0	-8077.0
254.131	3233.6	-1753.4	1076.2	1609000.0	-4550121.0	-9383.0
254.132	3917.4	862.7	164.5	-780672.0	-5675744.0	-15597.0
254.133	4480.1	673.1	609.3	-613979.0	-6599071.0	-16904.0
254.134	4520.9	-265.2	1760.6	221636.0	-6665726.0	-17816.0
254.135	5083.2	-449.0	2221.5	383923.0	-7589155.0	-19122.0
254.136	2015.2	-16.6	-2170.3	38689.0	-2550046.0	-5669.0
254.137	2578.0	-209.2	-1711.0	208325.0	-3474348.0	-6976.0
254.138	2617.6	-1020.1	-591.6	937912.0	-3539308.0	-7888.0
254.139	3179.9	-1207.0	-136.4	1104000.0	-4461737.0	-9194.0
254.140	2370.1	3639.2	-6840.1	-3297000.0	-3136061.0	-8897.0
254.141	2933.0	3466.1	-6383.2	-3146000.0	-4060338.0	-10204.0
254.142	4741.6	-3591.6	6565.8	3244000.0	-7025767.0	-17561.0
254.143	5303.9	-3780.4	7027.6	3412000.0	-7949196.0	-18868.0
254.144	1787.0	3186.9	-6969.8	-2867000.0	-2177906.0	-5899.0
254.145	2349.8	3013.9	-6512.8	-2717000.0	-3102208.0	-7206.0
254.146	4157.7	-3983.4	6434.4	3631000.0	-6066815.0	-14564.0
254.147	4720.1	-4172.2	6896.2	3799000.0	-6989219.0	-15871.0
254.148	2363.5	3557.4	-6562.4	-3212000.0	-3125735.0	-8887.0
254.149	2926.3	3384.0	-6105.3	-3060000.0	-4049037.0	-10195.0
254.150	4735.3	-3680.0	6855.2	3331000.0	-7015365.0	-17551.0
254.151	5297.7	-3869.3	7316.9	3500000.0	-7938768.0	-18858.0
254.152	1793.4	3269.0	-7246.9	-2952000.0	-2189284.0	-5908.0
254.153	2356.4	3096.3	-6789.9	-2802000.0	-3113535.0	-7215.0

254.154	4164.0	-3893.3	6145.2	3542000.0	-6076218.0	-14574.0
254.155	4726.4	-4082.1	6607.0	3710000.0	-6999621.0	-15881.0
254.156	2550.1	1891.8	-2819.6	-1692000.0	-3430422.0	-9533.0
254.157	3113.0	1719.4	-2362.5	-1542000.0	-4354699.0	-10840.0
254.158	4561.2	-1745.4	2520.5	1537000.0	-6730508.0	-16927.0
254.159	5123.6	-1934.2	2982.1	1705000.0	-7653911.0	-18234.0
254.160	1966.8	1442.1	-2949.5	-1265000.0	-2472318.0	-6534.0
254.161	2529.7	1269.7	-2492.4	-1115000.0	-3396595.0	-7841.0
254.162	3977.6	-2140.8	2389.6	1927000.0	-5771480.0	-13931.0
254.163	4539.9	-2330.3	2851.3	2096000.0	-6694909.0	-15238.0
254.164	2543.5	1807.5	-2541.6	-1604000.0	-3420096.0	-9524.0
254.165	3106.4	1635.0	-2084.4	-1453000.0	-4344373.0	-10831.0
254.166	4554.8	-1832.2	2809.3	1623000.0	-6720131.0	-16917.0
254.167	5117.2	-2017.6	3270.5	1788000.0	-7643534.0	-18224.0
254.168	1973.2	1527.3	-3226.7	-1353000.0	-2482695.0	-6542.0
254.169	2536.2	1354.9	-2769.6	-1203000.0	-3406947.0	-7850.0
254.170	3983.9	-2054.8	2100.4	1842000.0	-5781882.0	-13941.0
254.171	4546.3	-2243.7	2562.2	2010000.0	-6705286.0	-15248.0
254.268	2548.1	1366.2	-2696.0	-1243000.0	-3426929.0	-10417.0
254.269	4424.3	782.9	-1153.6	-734469.0	-6507219.0	-14775.0
254.270	3260.1	-818.2	1324.7	726372.0	-4594402.0	-13016.0
254.271	5134.7	-1444.7	2863.1	1283000.0	-7672097.0	-17372.0
254.272	1964.9	912.1	-2826.3	-811342.0	-2468800.0	-7419.0
254.273	3840.9	334.0	-1302.0	-306874.0	-5549140.0	-11777.0
254.274	2676.2	-1209.7	1193.1	1111000.0	-3635450.0	-10019.0
254.275	4550.8	-1838.8	2732.0	1670000.0	-6713145.0	-14375.0
254.276	2602.1	840.6	-1489.5	-760516.0	-3515238.0	-10608.0
254.277	4478.4	248.6	37.2	-244129.0	-6595502.0	-14966.0
254.278	3206.0	-264.2	111.0	214539.0	-4506119.0	-12826.0
254.279	5080.6	-869.6	1646.7	750975.0	-7583814.0	-17182.0
254.280	2018.8	389.6	-1620.2	-331616.0	-2557133.0	-7609.0
254.281	3894.9	-184.0	-99.5	169357.0	-5637448.0	-11967.0
254.282	2622.2	-658.4	-20.3	601659.0	-3547141.0	-9829.0
254.283	4496.9	-1295.1	1519.4	1167000.0	-6624811.0	-14185.0
254.284	2541.5	1284.3	-2417.4	-1159000.0	-3416603.0	-10407.0
254.285	4417.7	700.4	-872.0	-649319.0	-6496892.0	-14765.0
254.286	3253.7	-912.8	1614.7	823630.0	-4584024.0	-13007.0
254.287	5128.3	-1530.7	3152.4	1370000.0	-7661720.0	-17363.0
254.288	1971.2	994.0	-3103.5	-893638.9	-2479202.0	-7428.0
254.289	3847.0	415.7	-1580.1	-387311.0	-5558593.0	-11786.0
254.290	2682.4	-1116.3	904.2	1020000.0	-3645877.0	-10029.0
254.291	4556.9	-1745.2	2442.8	1578000.0	-6723598.0	-14384.0
254.292	2595.6	759.5	-1210.1	-676679.0	-3504886.0	-10598.0
254.293	4471.6	162.1	325.4	-154618.0	-6584226.0	-14956.0
254.294	3199.6	-346.8	399.7	300769.0	-4495742.0	-12817.0
254.295	5074.0	-954.5	1935.9	837823.1	-7573488.0	-17172.0
254.296	2025.1	471.0	-1897.4	-413228.0	-2567536.0	-7619.0
254.297	3901.2	-105.7	-376.9	91933.0	-5647851.0	-11977.0
254.298	2628.4	-565.3	-309.4	510676.0	-3557569.0	-9839.0
254.299	4503.3	-1189.1	1228.9	1063000.0	-6635189.0	-14195.0
257.1	2394.2	83.1	-2979.5	-117771.0	-11352950.0	4241.0
257.2	2860.9	100.0	-3483.8	-136849.0	-16764620.0	3464.0
257.3	2902.2	155.2	-5352.2	-210397.0	-13344150.0	8729.0
257.4	3368.9	171.7	-5855.6	-228878.0	-18755820.0	7952.0
257.5	1841.5	63.5	-2292.7	-90229.0	-8733088.0	3262.0
257.6	2308.1	80.5	-2797.0	-109404.0	-14144780.0	2485.0
257.7	2349.5	135.5	-4665.2	-182789.0	-10724280.0	7750.0
257.8	2816.1	152.2	-5168.6	-201421.0	-16125980.0	6973.0
257.9	3327.5	117.1	-3987.9	-156441.0	-22176310.0	2687.0
257.10	2749.8	133.6	-4640.7	-182623.0	-12752790.0	7382.0

257.11	3683.1	167.4	-5648.0	-220893.0	-23566150.0	5829.0
257.12	2774.8	97.6	-3301.3	-129045.0	-19556450.0	1708.0
257.13	2197.1	113.9	-3953.7	-155034.0	-10122930.0	6403.0
257.14	3130.4	147.9	-4961.7	-193529.0	-20946290.0	4850.0
257.15	3216.5	150.3	-5144.1	-201367.0	-18154460.0	6606.0
257.16	2663.7	130.7	-4457.2	-173845.0	-15534620.0	5626.0
257.17	2186.3	75.8	-2752.6	-109485.0	-8928663.0	4595.0
257.18	2652.9	92.4	-3256.6	-128048.0	-14337360.0	3818.0
257.19	2694.3	147.8	-5125.5	-202019.0	-10916860.0	9083.0
257.20	3160.9	164.3	-5628.8	-220285.0	-16328550.0	8306.0
257.21	1633.6	56.2	-2065.8	-81912.0	-6304801.0	3616.0
257.22	2100.2	72.9	-2569.8	-100594.0	-11717500.0	2839.0
257.23	2141.6	128.2	-4438.5	-174548.0	-8290998.0	8104.0
257.24	2608.2	144.6	-4941.8	-192708.0	-13698690.0	7327.0
257.25	3119.6	109.5	-3760.9	-147593.0	-19749020.0	3042.0
257.26	2541.9	126.2	-4413.9	-174366.0	-10315500.0	7737.0
257.27	3475.2	159.7	-5421.0	-212018.0	-21138860.0	6183.0
257.28	2566.8	90.0	-3074.1	-120142.0	-17119190.0	2062.0
257.29	1989.2	106.6	-3726.9	-146693.0	-7695639.0	6758.0
257.30	2922.4	140.2	-4734.2	-184587.0	-18519020.0	5204.0
257.31	2047.7	70.9	-2601.5	-103873.0	-7309806.0	4831.0
257.32	2514.3	87.4	-3105.1	-122221.0	-12722500.0	4055.0
257.33	2403.3	121.3	-4262.6	-168731.0	-8700643.0	7973.0
257.34	2869.9	137.8	-4766.1	-187071.0	-14112340.0	7196.0
257.35	1494.9	51.4	-1915.0	-76471.0	-4685968.0	3852.0
257.36	1961.6	67.8	-2418.3	-94731.0	-10092640.0	3076.0
257.37	1850.5	101.6	-3575.6	-140991.0	-6075806.0	6994.0
257.38	2317.2	118.2	-4079.0	-159441.0	-11482470.0	6217.0
257.39	3008.5	142.8	-4917.2	-192711.0	-15727200.0	6960.0
257.40	2455.8	123.1	-4230.2	-165059.0	-13107330.0	5981.0
257.41	2477.4	86.1	-3070.3	-121128.0	-12331860.0	4099.0
257.42	2944.0	103.1	-3574.7	-140378.0	-17743550.0	3322.0
257.43	2985.4	158.1	-5442.8	-213610.0	-14313050.0	8587.0
257.44	3452.1	174.8	-5946.4	-232407.0	-19724720.0	7810.0
257.45	1924.7	66.5	-2383.5	-93604.0	-9701992.0	3120.0
257.46	2391.3	83.5	-2887.9	-112955.0	-15113690.0	2343.0
257.47	2432.7	138.5	-4755.9	-186123.0	-11693190.0	7608.0
257.48	2899.3	155.2	-5259.5	-204966.0	-17104880.0	6831.0
257.49	3410.7	120.2	-4078.9	-160029.0	-23145220.0	2545.0
257.50	2833.0	136.5	-4731.4	-185958.0	-13721690.0	7241.0
257.51	3766.3	170.4	-5739.0	-224461.0	-24535050.0	5687.0
257.52	2858.0	100.7	-3392.2	-132582.0	-20525350.0	1566.0
257.53	2280.3	116.9	-4044.3	-158346.0	-11091830.0	6261.0
257.54	3213.6	150.9	-5052.6	-197094.0	-21915190.0	4708.0
257.55	3299.6	153.3	-5234.9	-204893.0	-19133390.0	6464.0
257.56	2746.9	133.7	-4548.0	-177380.0	-16503520.0	5485.0
257.57	2532.9	88.1	-3130.9	-123375.0	-12977780.0	4004.0
257.58	2999.5	105.1	-3635.2	-142751.0	-18389480.0	3228.0
257.59	2888.5	138.5	-4791.9	-188214.0	-14367620.0	7146.0
257.60	3355.1	155.3	-5295.4	-207243.0	-19779310.0	6369.0
257.61	1980.1	68.5	-2444.0	-95860.0	-10347950.0	3025.0
257.62	2446.8	85.6	-2948.5	-115363.0	-15759610.0	2248.0
257.63	2335.7	118.8	-4104.7	-160564.0	-11747780.0	6167.0
257.64	2802.4	135.8	-4608.5	-179740.0	-17149450.0	5390.0
257.108	2606.8	40.9	-7900.8	-475627.0	-2644046.0	-2628.0
257.109	2940.4	94.5	-5362.9	-545483.0	-4245462.0	-927.0
257.110	3329.8	244.7	-6489.7	-709957.0	-5046730.0	451.0
257.111	3663.6	295.7	-8508.9	-778658.0	-6649095.0	2152.0
257.112	429.9	-47.3	-2438.6	371529.0	-12411000.0	7958.0
257.113	763.3	19.3	-811.1	280722.0	-14016470.0	9658.0

257.114	1151.6	320.6	-10990.1	-158419.0	-14818010.0	11028.0
257.115	1485.4	379.3	-13034.5	-242317.0	-16423380.0	12730.0
257.116	2488.9	-51.1	-12091.4	-345491.0	-2442940.0	-3266.0
257.117	2822.5	2.0	-9566.0	-414774.0	-4045355.0	-1565.0
257.118	3448.4	330.6	-11593.5	-833805.9	-5249658.0	1087.0
257.119	3782.3	381.4	-13612.6	-902062.0	-6851998.0	2789.0
257.120	312.0	-138.0	-5922.4	499087.0	-12210890.0	7320.0
257.121	645.6	-77.7	-4249.5	416729.0	-13816310.0	9021.0
257.122	1269.8	411.4	-16497.7	-287707.0	-15018040.0	11668.0
257.123	1603.5	469.5	-18493.7	-371633.0	-16623430.0	13370.0
257.124	2590.8	598.1	-11864.0	-1397000.0	-2733103.0	-2499.0
257.125	2924.2	652.5	-9321.7	-1469000.0	-4334569.0	-798.0
257.126	3313.2	818.4	-4850.4	-1653000.0	-5135939.0	581.0
257.127	3647.2	868.6	-6856.9	-1721000.0	-6738253.0	2283.0
257.128	446.8	-435.6	313.5	957245.0	-12326710.0	7816.0
257.129	780.6	-376.0	-1738.0	872758.0	-13932080.0	9518.0
257.130	1169.6	-95.5	-12739.9	463126.0	-14733450.0	10888.0
257.131	1503.4	-36.9	-14783.0	378995.0	-16338810.0	12591.0
257.132	2472.9	512.5	-15811.3	-1278000.0	-2531996.0	-3135.0
257.133	2806.7	566.6	-13291.9	-1349000.0	-4134361.0	-1433.0
257.134	3432.0	904.0	-9964.5	-1776000.0	-5337817.0	1218.0
257.135	3765.9	954.4	-11981.8	-1844000.0	-6940156.0	2920.0
257.136	329.6	-536.6	-3100.5	1098000.0	-12126430.0	7180.0
257.137	663.0	-475.3	-1433.9	1014000.0	-13731900.0	8882.0
257.138	1287.1	-10.6	-17847.0	339167.0	-14933660.0	11526.0
257.139	1621.0	47.9	-19892.3	255598.0	-16539000.0	13228.0
257.140	1005.8	-332.3	-18946.4	270249.0	-3260980.0	-2508.0
257.141	1339.4	-284.1	-16406.8	211798.0	-4863396.0	-807.0
257.142	3414.7	601.9	-23340.5	-954876.9	-11274200.0	7742.0
257.143	3748.5	664.1	-25375.5	-1047000.0	-12869570.0	9444.0
257.144	353.1	-391.3	-16602.9	586252.0	-6192472.0	671.0
257.145	686.6	-343.2	-14063.3	528080.0	-7794913.0	2372.0
257.146	2761.2	658.0	-24872.0	-855238.0	-14199900.0	10914.0
257.147	3094.9	719.9	-26898.0	-946578.0	-15805290.0	12616.0
257.148	1000.9	-161.7	-20048.0	-12710.0	-3288222.0	-2469.0
257.149	1334.5	-107.6	-17504.6	-83115.0	-4890638.0	-768.0
257.150	3409.5	724.4	-22784.3	-1137000.0	-11295520.0	7785.0
257.151	3743.3	786.8	-24816.6	-1229000.0	-12900890.0	9486.0
257.152	358.2	-559.1	-15546.7	862938.9	-6166179.0	631.0
257.153	691.7	-511.1	-13001.7	804938.0	-7768620.0	2333.0
257.154	2766.3	534.2	-25430.9	-670356.0	-14178610.0	10873.0
257.155	3100.0	594.5	-27425.9	-758703.0	-15784000.0	12574.0
257.156	613.0	-641.2	-32936.5	709931.0	-2593574.0	-4636.0
257.157	946.5	-593.3	-30389.4	652059.0	-4195015.0	-2934.0
257.158	3808.7	874.6	-40475.5	-1336000.0	-11944300.0	9865.0
257.159	4142.5	937.1	-42506.3	-1428000.0	-13549670.0	11566.0
257.160	-39.6	-701.4	-30597.6	1029000.0	-5524041.0	-1456.0
257.161	293.9	-653.5	-28050.5	970994.1	-7126482.0	245.0
257.162	3155.0	931.3	-42011.6	-1238000.0	-14880050.0	13037.0
257.163	3488.8	993.7	-44042.8	-1330000.0	-16475410.0	14739.0
257.164	608.1	-467.4	-34030.2	420186.0	-2619816.0	-4597.0
257.165	941.5	-413.8	-31479.7	350810.0	-4222283.0	-2896.0
257.166	3803.7	997.2	-39909.4	-1518000.0	-11965570.0	9907.0
257.167	4137.5	1059.7	-41938.3	-1611000.0	-13570940.0	11608.0
257.168	-34.5	-870.5	-29533.1	1308000.0	-5497748.0	-1495.0
257.169	299.0	-822.5	-26986.0	1251000.0	-7100189.0	207.0
257.170	3160.1	809.4	-42565.8	-1057000.0	-14848760.0	12995.0
257.171	3493.9	871.4	-44600.5	-1148000.0	-16454120.0	14696.0
257.268	1455.3	-94.6	-8003.2	-15840.0	-4193009.0	-905.0
257.269	2567.4	81.2	-107.2	-244141.0	-9539036.0	4766.0

257.270	2177.9	149.3	-5754.4	-307415.0	-6596794.0	2172.0
257.271	3290.7	342.7	-12545.0	-584045.0	-11935640.0	7844.0
257.272	802.5	-148.2	-5642.5	289658.0	-7124526.0	2273.0
257.273	1914.2	41.3	-811.2	43746.0	-12464660.0	7942.0
257.274	1524.5	192.8	-7241.8	-182415.0	-9527463.0	5344.0
257.275	2637.1	386.2	-13911.5	-460358.0	-14871360.0	11016.0
257.276	1337.5	-186.2	-12202.5	113625.0	-3992877.0	-1544.0
257.277	2449.4	-6.3	-3755.5	-120760.0	-9333955.0	4127.0
257.278	2296.1	236.0	-10898.7	-431429.0	-6797824.0	2808.0
257.279	3409.1	423.6	-17622.9	-697853.0	-12135620.0	8481.0
257.280	684.7	-241.7	-9836.7	423398.0	-6924395.0	1635.0
257.281	1796.3	-53.7	-2756.3	178011.0	-12264550.0	7305.0
257.282	1642.6	275.0	-12393.3	-297675.0	-9733519.0	5981.0
257.283	2755.1	472.6	-19146.1	-584055.0	-15071440.0	11654.0
257.284	1450.5	74.5	-9108.5	-295585.0	-4220226.0	-866.0
257.285	2562.5	252.6	-895.7	-527095.0	-9560278.0	4805.0
257.286	2172.8	319.8	-5265.5	-586211.0	-6623087.0	2211.0
257.287	3285.4	491.0	-11921.2	-819951.0	-11966990.0	7884.0
257.288	807.7	-289.4	-4550.4	512675.0	-7098208.0	2232.0
257.289	1919.5	-81.4	-1370.3	227010.0	-12443310.0	7901.0
257.290	1529.7	69.6	-7706.5	-234.0	-9502145.0	5302.0
257.291	2642.5	261.4	-14438.9	-273441.0	-14839990.0	10974.0
257.292	1332.6	-17.4	-13298.2	-165532.0	-4019119.0	-1504.0
257.293	2444.7	163.1	-4862.2	-400921.0	-9360146.0	4167.0
257.294	2291.1	406.4	-10399.4	-710601.0	-6824092.0	2848.0
257.295	3404.0	578.5	-17112.0	-945688.9	-12166920.0	8521.0
257.296	689.9	-380.1	-8737.8	640754.0	-6898076.0	1594.0
257.297	1801.4	-173.4	-1910.4	357863.0	-12243260.0	7263.0
257.298	1647.9	154.0	-12937.0	-119097.0	-9702175.0	5939.0
257.299	2760.3	347.1	-19646.0	-396866.0	-15040130.0	11612.0
266.1	9019.6	146.3	-15048.5	-267050.0	13506920.0	-330.0
266.2	17913.1	161.1	-19917.5	-289665.0	24111870.0	-1754.0
266.3	7761.3	292.1	-26087.6	-535868.0	18417880.0	1710.0
266.4	16654.8	306.6	-30950.2	-557935.0	29022820.0	287.0
266.5	6941.3	112.4	-11591.7	-205078.0	10382970.0	-253.0
266.6	15834.9	127.2	-16463.3	-227799.0	20984940.0	-1676.0
266.7	5683.1	258.1	-22631.2	-473843.0	15290950.0	1788.0
266.8	14576.6	272.7	-27498.6	-496069.0	25895900.0	365.0
266.9	26806.6	176.3	-24803.0	-313018.0	34716810.0	-3177.0
266.10	8138.8	248.4	-22775.8	-455260.0	16943590.0	1098.0
266.11	25925.8	278.2	-32528.4	-500842.0	38153490.0	-1748.0
266.12	24728.3	142.5	-21353.9	-251338.0	31589860.0	-3100.0
266.13	6060.6	214.4	-19319.4	-393250.0	13816670.0	1176.0
266.14	23847.5	244.5	-29078.9	-439241.0	35026540.0	-1671.0
266.15	17032.3	263.0	-27637.9	-477573.0	27548540.0	-325.0
266.16	14954.1	229.1	-24186.9	-415614.0	24421610.0	-248.0
266.17	5015.6	140.0	-12847.9	-257498.0	8739705.0	311.0
266.18	13909.2	154.5	-17704.9	-279521.0	19346680.0	-1112.0
266.19	3757.4	285.7	-23885.3	-526226.0	13652690.0	2352.0
266.20	12651.0	300.1	-28740.8	-547954.0	24247660.0	929.0
266.21	2937.4	106.1	-9391.8	-195540.0	5615778.0	389.0
266.22	11831.0	120.6	-14250.3	-217630.0	16219750.0	-1035.0
266.23	1679.1	251.9	-20430.1	-464467.0	10525740.0	2430.0
266.24	10572.7	266.1	-25285.0	-485990.0	21130710.0	1006.0
266.25	22802.7	169.6	-22585.2	-302716.0	29941620.0	-2535.0
266.26	4134.9	242.0	-20573.0	-445686.0	12178400.0	1740.0
266.27	21921.9	271.5	-30310.3	-490496.0	33378300.0	-1107.0
266.28	20724.4	135.7	-19133.2	-240866.0	26824670.0	-2458.0
266.29	2056.6	208.0	-17116.3	-383585.0	9052451.0	1817.0
266.30	19843.6	237.6	-26859.3	-428705.0	30261340.0	-1029.0



266.31	2346.3	135.8	-11381.9	-251121.0	5561905.0	739.0
266.32	11239.9	150.1	-16231.3	-272792.0	16159880.0	-684.0
266.33	1465.6	237.7	-19104.3	-439165.0	8998603.0	2168.0
266.34	10359.2	252.2	-23959.5	-461008.0	19596580.0	744.0
266.35	268.1	102.0	-7926.0	-189406.0	2436977.0	816.0
266.36	9161.7	116.2	-12775.6	-210871.0	13042950.0	-607.0
266.37	-612.6	203.7	-15647.6	-376987.0	5873676.0	2245.0
266.38	8280.9	218.1	-20502.5	-398893.0	16479620.0	822.0
266.39	13028.4	256.5	-25428.4	-467558.0	22783350.0	317.0
266.40	10950.2	222.5	-21971.8	-405449.0	19656420.0	394.0
266.41	10621.2	148.9	-15929.1	-270943.0	15413010.0	-587.0
266.42	19514.7	163.8	-20803.0	-293747.0	26017950.0	-2010.0
266.43	9362.9	294.5	-26968.8	-539577.0	20323960.0	1454.0
266.44	18256.4	309.3	-31837.0	-562012.0	30928910.0	31.0
266.45	8542.9	114.9	-12472.3	-208990.0	12286050.0	-510.0
266.46	17436.4	129.9	-17348.9	-231922.0	22891000.0	-1933.0
266.47	7284.6	260.6	-23512.6	-477708.0	17197010.0	1531.0
266.48	16178.1	275.4	-28385.4	-500190.0	27801960.0	108.0
266.49	28408.1	179.1	-25690.6	-317256.0	36622880.0	-3434.0
266.50	9740.4	250.9	-23657.0	-459128.0	18849680.0	842.0
266.51	27527.3	280.9	-33416.4	-505047.0	40059550.0	-2005.0
266.52	26329.9	145.2	-22242.9	-255491.0	33495950.0	-3356.0
266.53	7662.1	216.9	-20199.9	-397034.0	15722730.0	919.0
266.54	25449.0	247.2	-29967.4	-443451.0	36932590.0	-1928.0
266.55	18633.9	265.7	-28524.6	-481651.0	29454620.0	-582.0
266.56	16555.6	231.8	-25073.9	-419714.0	26327670.0	-504.0
266.57	11688.9	150.6	-16516.3	-273552.0	16683720.0	-758.0
266.58	20582.4	165.5	-21393.2	-296503.0	27288670.0	-2181.0
266.59	10808.1	252.6	-24244.4	-461745.0	20120390.0	670.0
266.60	19701.6	267.4	-29115.8	-484367.0	30725340.0	-753.0
266.61	9610.6	116.7	-13059.7	-211607.0	13556770.0	-681.0
266.62	18504.1	131.7	-17939.1	-234731.0	24161710.0	-2104.0
266.63	8729.9	218.6	-20787.4	-399604.0	16993470.0	748.0
266.64	17623.3	233.5	-25665.2	-422458.0	27598390.0	-675.0
266.108	7859.5	108.9	-4433.8	-265457.0	9879777.0	1166.0
266.109	9901.5	198.8	-11805.9	-441425.0	13170530.0	3328.0
266.110	5854.6	-6.7	-18023.1	-15018.0	16524430.0	4777.0
266.111	7897.2	84.0	-23516.4	-193094.0	19812330.0	6941.0
266.112	4961.9	326.0	-17272.3	-595788.0	4961090.0	-5807.0
266.113	7002.3	417.1	-25180.5	-778778.0	8259433.0	-3645.0
266.114	2944.1	304.1	-35727.6	-558229.0	11656480.0	-2198.0
266.115	4987.7	396.8	-42572.2	-745361.0	14944630.0	-34.0
266.116	7892.1	225.5	-2767.2	-432511.0	9075042.0	726.0
266.117	9934.2	314.5	-10157.4	-607349.0	12365820.0	2888.0
266.118	5816.1	-129.0	-26593.8	150308.0	17354670.0	5217.0
266.119	7858.7	-38.0	-32324.8	-27624.0	20642570.0	7381.0
266.120	4994.4	442.1	-15769.5	-762479.0	4157330.0	-6247.0
266.121	7036.6	533.7	-23639.6	-945973.1	7448130.0	-4084.0
266.122	2911.9	158.1	-41349.2	-356585.0	12458310.0	-1756.0
266.123	4955.8	254.2	-46701.0	-547785.0	15746540.0	408.0
266.124	7851.4	56.6	-7013.0	-1742000.0	9919723.0	1052.0
266.125	9894.3	146.4	-12848.9	-1917000.0	13208700.0	3215.0
266.126	5851.2	-63.0	-22827.8	-1492000.0	16543570.0	4662.0
266.127	7893.6	27.0	-28590.7	-1668000.0	19831420.0	6826.0
266.128	4942.5	503.4	-27035.3	582940.0	5043171.0	-5691.0
266.129	6985.6	597.7	-34666.8	393853.0	8330199.0	-3528.0
266.130	2926.5	461.3	-45444.9	650419.0	11732010.0	-2081.0
266.131	4970.3	554.0	-52303.6	463144.0	15020220.0	84.0
266.132	7889.1	154.5	-2074.1	-1882000.0	9093281.0	612.0
266.133	9931.2	243.7	-9446.2	-2057000.0	12385060.0	2775.0

266.134	5812.9	-183.5	-31637.6	-1328000.0	17373860.0	5104.0
266.135	7855.4	-92.4	-37389.5	-1506000.0	20661740.0	7268.0
266.136	4978.1	618.3	-25554.7	418164.0	4228198.0	-6132.0
266.137	7021.0	713.3	-33208.7	229463.0	7515174.0	-3969.0
266.138	2893.1	343.1	-46215.2	816004.0	12533550.0	-1641.0
266.139	4936.6	436.4	-53069.6	628148.0	15821680.0	524.0
266.140	9190.1	304.9	2459.7	-616196.0	399149.9	-5475.0
266.141	11232.7	386.8	-4902.3	-776891.0	3688264.0	-3313.0
266.142	2486.5	-4.6	-56216.5	8124.0	22630450.0	6552.0
266.143	4529.8	96.0	-61501.9	-191860.0	25918530.0	8717.0
266.144	8326.4	347.6	122.6	-662862.0	-1097841.0	-7568.0
266.145	10369.0	429.4	-7239.3	-823213.9	2190619.0	-5406.0
266.146	1611.9	102.8	-61668.8	-197981.0	21178700.0	4461.0
266.147	3655.2	204.1	-66967.6	-398843.0	24466780.0	6625.0
266.148	9188.8	286.8	2673.8	-1057000.0	405820.3	-5509.0
266.149	11230.7	376.7	-4686.3	-1233000.0	3697567.0	-3346.0
266.150	2492.2	-54.3	-54972.1	-351188.0	22611900.0	6517.0
266.151	4535.0	46.8	-60294.2	-552058.0	25899850.0	8681.0
266.152	8326.6	367.3	-164.0	-226252.0	-1098791.0	-7534.0
266.153	10369.8	448.7	-7512.2	-386048.0	2187078.0	-5372.0
266.154	1607.7	150.5	-62823.9	164968.0	21197630.0	4496.0
266.155	3650.7	252.4	-68171.4	-35980.0	24485630.0	6660.0
266.156	9296.4	690.4	7958.5	-1166000.0	-2273898.0	-6941.0
266.157	11339.9	771.6	615.7	-1325000.0	1011232.0	-4779.0
266.158	2362.7	-408.3	-82293.5	566616.0	25379060.0	8023.0
266.159	4405.4	-307.0	-87629.5	365496.0	28666990.0	10188.0
266.160	8433.5	730.8	5611.9	-1208000.0	-3773686.0	-9034.0
266.161	10477.0	812.0	-1730.9	-1367000.0	-488556.8	-6871.0
266.162	1488.3	-300.3	-87640.1	358904.0	23927360.0	5932.0
266.163	3531.0	-199.0	-92976.5	157751.0	27215280.0	8096.0
266.164	9294.1	677.4	8184.9	-1616000.0	-2263481.0	-6975.0
266.165	11336.9	766.2	843.7	-1791000.0	1024471.0	-4812.0
266.166	2367.1	-457.2	-81213.8	206464.0	25360180.0	7989.0
266.167	4409.7	-356.1	-86548.1	5522.0	28648080.0	10153.0
266.168	8435.8	747.6	5348.5	-766090.0	-3783103.0	-9000.0
266.169	10479.3	828.8	-1994.3	-925565.1	-497973.3	-6838.0
266.170	1482.0	-249.6	-88891.6	716275.0	23945760.0	5967.0
266.171	3525.3	-149.2	-94180.0	516640.0	27233840.0	8132.0
266.268	4468.1	59.5	1545.6	-120001.0	4294887.0	-3798.0
266.269	11275.4	358.5	-22995.2	-706478.0	15258880.0	3412.0
266.270	2460.3	-63.5	-15800.5	136025.0	10953810.0	-191.0
266.271	9270.6	260.0	-34093.2	-503249.0	21910560.0	7024.0
266.272	3602.0	112.2	-786.1	-184571.0	2806287.0	-5890.0
266.273	10407.6	396.8	-26301.0	-751489.0	13778850.0	1318.0
266.274	1585.8	38.5	-20968.6	-52789.0	9496080.0	-2282.0
266.275	8394.9	366.3	-41627.2	-702468.0	20458530.0	4932.0
266.276	4499.1	177.2	3187.3	-288693.0	3495747.0	-4237.0
266.277	11307.5	473.7	-21336.9	-871411.1	14457020.0	2971.0
266.278	2422.2	-180.9	-23802.4	294862.0	11784150.0	251.0
266.279	9233.0	140.8	-41175.2	-337730.0	22731030.0	7465.0
266.280	3634.8	226.3	867.0	-346553.0	2000604.0	-6330.0
266.281	10441.8	513.2	-24780.1	-917863.0	12967520.0	879.0
266.282	1548.3	-83.0	-28773.9	115043.0	10321570.0	-1841.0
266.283	8360.1	241.0	-46485.6	-529058.0	21269700.0	5373.0
266.284	4467.2	38.5	1751.5	-555204.0	4299659.0	-3832.0
266.285	11273.9	337.5	-22787.7	-1142000.0	15268500.0	3378.0
266.286	2460.1	-77.3	-15877.8	-309038.0	10953760.0	-225.0
266.287	9271.4	237.3	-32981.9	-920848.1	21900760.0	6989.0
266.288	3600.2	150.2	-2597.6	206163.0	2813831.0	-5855.0
266.289	10403.8	450.4	-29148.3	-398561.0	13797880.0	1354.0

266.290	1580.4	93.6	-22233.3	298189.0	9518710.0	-2247.0
266.291	8389.6	412.7	-44492.9	-338326.0	20477180.0	4967.0
266.292	4499.7	155.3	3428.6	-722687.0	3494899.0	-4272.0
266.293	11306.3	453.4	-21132.6	-1307000.0	14466710.0	2938.0
266.294	2422.6	-194.3	-23772.2	-150851.0	11774250.0	216.0
266.295	9233.8	113.5	-41022.8	-753112.0	22731230.0	7431.0
266.296	3632.6	266.6	-1100.1	38787.0	2010046.0	-6295.0
266.297	10437.1	567.3	-27640.5	-565384.0	12986330.0	913.0
266.298	1543.8	-32.7	-29920.6	472120.0	10340430.0	-1806.0
266.299	8355.7	286.7	-47665.9	-162857.0	21288590.0	5408.0
267.1	28.7	-27.7	-256.5	52385.0	1240277.0	-2033.0
267.2	-572.8	-30.8	-248.2	58900.0	2792767.0	-3743.0
267.3	-433.5	-52.6	-278.1	101425.0	3369086.0	-2183.0
267.4	-1035.0	-56.0	-284.1	108511.0	4920576.0	-3893.0
267.5	22.4	-21.3	-200.8	40303.0	950150.5	-1563.0
267.6	-579.0	-24.3	-192.4	46736.0	2502195.0	-3273.0
267.7	-439.7	-46.3	-222.3	89464.0	3078514.0	-1714.0
267.8	-1041.2	-49.6	-230.0	96388.0	4631004.0	-3424.0
267.9	-1174.3	-33.6	-244.4	64873.0	4345256.0	-5453.0
267.10	-294.8	-45.1	-270.9	86581.0	2730254.0	-2138.0
267.11	-1497.9	-51.2	-277.1	99564.0	5835208.0	-5558.0
267.12	-1180.6	-27.0	-192.3	52573.0	4054659.0	-4983.0
267.13	-301.1	-38.7	-215.3	74601.0	2439656.0	-1668.0
267.14	-1504.1	-44.6	-226.1	87218.0	5544636.0	-5088.0
267.15	-896.3	-48.3	-273.8	93465.0	4282743.0	-3848.0
267.16	-902.6	-42.0	-218.6	81433.0	3992146.0	-3378.0
267.17	299.5	-26.1	-258.3	49075.0	543266.2	-1263.0
267.18	-302.0	-29.4	-250.1	56080.0	2095428.0	-2973.0
267.19	-162.7	-51.1	-276.2	98179.0	2671748.0	-1413.0
267.20	-764.2	-54.6	-278.5	105557.0	4223237.0	-3123.0
267.21	293.3	-19.7	-203.6	36986.0	252681.2	-793.0
267.22	-308.2	-23.0	-193.5	43934.0	1804856.0	-2503.0
267.23	-168.9	-44.6	-222.1	85989.0	2381176.0	-943.0
267.24	-770.4	-48.2	-224.6	93529.0	3932665.0	-2653.0
267.25	-903.5	-32.3	-243.1	62156.0	3647918.0	-4683.0
267.26	-24.0	-43.4	-268.3	83210.0	2032915.0	-1368.0
267.27	-1227.0	-49.9	-272.6	96879.0	5136894.0	-4788.0
267.28	-909.7	-25.8	-188.8	49983.0	3357346.0	-4213.0
267.29	-30.3	-37.2	-212.2	71326.0	1742317.0	-898.0
267.30	-1233.3	-43.5	-219.7	84689.0	4846297.0	-4318.0
267.31	480.0	-25.1	-261.4	46890.0	78249.0	-749.0
267.32	-121.4	-28.5	-251.1	54177.0	1630219.0	-2459.0
267.33	156.5	-42.4	-266.3	81086.0	1567681.0	-854.0
267.34	-445.0	-45.9	-266.9	88453.0	3120170.0	-2564.0
267.35	473.8	-18.5	-208.1	34578.0	-212325.0	-279.0
267.36	-127.7	-22.1	-194.9	42055.0	1339622.0	-1989.0
267.37	150.3	-36.2	-210.0	69273.0	1277109.0	-385.0
267.38	-451.2	-39.6	-210.7	76542.0	2829598.0	-2095.0
267.39	-625.5	-46.9	-270.3	90532.0	3585404.0	-3078.0
267.40	-631.7	-40.6	-215.1	78614.0	3294833.0	-2608.0
267.41	-79.7	-28.3	-257.0	53637.0	1519792.0	-2341.0
267.42	-681.1	-31.3	-248.0	60013.0	3072307.0	-4051.0
267.43	-541.8	-53.3	-279.2	102874.0	3647627.0	-2492.0
267.44	-1143.3	-56.5	-285.6	109633.0	5200117.0	-4201.0
267.45	-85.9	-21.9	-201.3	41539.0	1229220.0	-1871.0
267.46	-687.4	-24.9	-192.8	47811.0	2781710.0	-3581.0
267.47	-548.1	-46.9	-224.3	90767.0	3357029.0	-2022.0
267.48	-1149.6	-50.1	-231.8	97475.0	4909519.0	-3732.0
267.49	-1282.7	-34.0	-245.7	65869.0	4623772.0	-5761.0
267.50	-403.2	-45.7	-272.2	87891.0	3009769.0	-2446.0

267.51	-1606.2	-51.6	-279.3	100587.0	6113748.0	-5866.0
267.52	-1288.9	-27.5	-194.0	53645.0	4334199.0	-5291.0
267.53	-409.4	-39.4	-215.8	75964.0	2719197.0	-1977.0
267.54	-1612.4	-45.1	-227.6	88244.0	5823176.0	-5397.0
267.55	-1004.7	-48.9	-275.0	94590.0	4561258.0	-4156.0
267.56	-1010.9	-42.5	-220.3	82536.0	4270687.0	-3687.0
267.57	-151.9	-28.7	-257.5	54457.0	1705486.0	-2547.0
267.58	-753.4	-31.6	-248.1	60723.0	3257976.0	-4256.0
267.59	-475.4	-46.1	-273.2	88728.0	3195462.0	-2652.0
267.60	-1076.9	-49.2	-275.9	95340.0	4747952.0	-4362.0
267.61	-158.1	-22.3	-201.7	42354.0	1414914.0	-2077.0
267.62	-759.6	-25.2	-193.7	48472.0	2967404.0	-3787.0
267.63	-481.6	-39.8	-216.9	76840.0	2904890.0	-2182.0
267.64	-1083.1	-42.8	-221.5	83263.0	4457380.0	-3892.0
267.108	-13.8	4.4	-8881.8	-220748.0	628537.0	-1141.0
267.109	-349.7	-15.2	-9110.8	-184652.0	1933334.0	-4102.0
267.110	-706.1	122.7	-6455.2	-341988.0	3285968.0	-4454.0
267.111	-1041.9	102.1	-6474.8	-304759.0	4588826.0	-7414.0
267.112	708.8	-133.8	3333.3	337446.0	-953283.8	4159.0
267.113	372.4	-148.4	3341.4	363775.0	353474.0	1196.0
267.114	11.8	90.6	479.0	15228.0	1724992.0	841.0
267.115	-323.6	73.9	1143.4	43325.0	3026951.0	-2119.0
267.116	92.2	68.1	-7290.7	-307356.0	350087.3	-1130.0
267.117	-243.7	46.8	-7496.8	-269164.0	1654210.0	-4092.0
267.118	-814.7	50.7	-8107.0	-251822.0	3574433.0	-4468.0
267.119	-1150.5	30.7	-8343.8	-215173.0	4878291.0	-7429.0
267.120	814.8	-70.5	2079.8	251929.0	-1231407.0	4170.0
267.121	478.9	-86.9	2068.4	280574.0	72439.1	1208.0
267.122	-94.1	19.3	1957.1	106189.0	2002141.0	832.0
267.123	-429.3	3.7	2623.3	133199.0	3304151.0	-2128.0
267.124	31.2	193.9	-15321.7	-650813.0	385070.8	-1123.0
267.125	-304.3	174.9	-15556.5	-614989.0	1687845.0	-4085.0
267.126	-659.2	321.8	-12565.1	-787144.0	3033860.0	-4435.0
267.127	-995.1	300.1	-12855.3	-748216.0	4338693.0	-7396.0
267.128	652.0	-232.1	3734.0	560438.0	-661311.4	4130.0
267.129	316.4	-246.9	3600.8	585501.0	641433.3	1168.0
267.130	-44.7	-29.2	710.3	267451.0	2014666.0	812.0
267.131	-380.1	-46.2	1412.0	295838.0	3316626.0	-2148.0
267.132	139.1	254.4	-13788.3	-732194.0	98487.8	-1111.0
267.133	-196.9	234.6	-14048.8	-695278.0	1403076.0	-4073.0
267.134	-767.7	253.3	-14391.7	-700550.0	3322350.0	-4449.0
267.135	-1103.5	233.5	-14646.9	-663927.0	4626208.0	-7410.0
267.136	758.7	-175.5	2477.9	484180.0	-943631.6	4140.0
267.137	423.2	-189.0	2405.8	508243.0	359075.4	1179.0
267.138	-150.7	-96.1	2240.5	353332.0	2293790.0	803.0
267.139	-486.2	-112.2	2890.7	380739.0	3595724.0	-2158.0
267.140	1046.8	-220.2	-7514.7	195574.0	-3030584.0	4582.0
267.141	711.2	-247.2	-7826.2	245449.0	-1727675.0	1620.0
267.142	-1269.0	293.2	-11791.4	-443726.0	5862245.0	-6478.0
267.143	-1604.5	283.4	-11323.3	-427062.0	7164179.0	-9439.0
267.144	1265.6	-283.3	-3212.6	406831.0	-3514107.0	6172.0
267.145	930.1	-310.4	-3525.0	457018.0	-2211173.0	3210.0
267.146	-1054.2	304.4	-9508.5	-380275.0	5396708.0	-4889.0
267.147	-1389.7	294.7	-9042.1	-363722.0	6698642.0	-7849.0
267.148	1060.8	-161.0	-9421.6	62343.0	-3106034.0	4588.0
267.149	724.9	-180.4	-9687.8	97995.0	-1801202.0	1627.0
267.150	-1252.0	329.1	-12202.9	-519639.0	5774556.0	-6471.0
267.151	-1587.7	318.0	-11676.5	-501185.0	7077439.0	-9431.0
267.152	1251.1	-346.8	-1755.7	544768.0	-3436784.0	6165.0
267.153	915.8	-372.1	-1932.2	592372.0	-2134799.0	3204.0

267.154	-1070.7	271.5	-9509.8	-307949.0	5481524.0	-4897.0
267.155	-1406.3	260.4	-9007.4	-288887.0	6784433.0	-7857.0
267.156	1399.2	-18.2	-6550.2	-75421.0	-3954233.0	4619.0
267.157	1063.9	-42.8	-6734.5	-28872.0	-2653248.0	1657.0
267.158	-1628.2	69.7	-13290.8	-157504.0	6814170.0	-6518.0
267.159	-1964.0	58.0	-12800.0	-138332.0	8118028.0	-9478.0
267.160	1618.3	-79.8	-5327.7	135476.0	-4439680.0	6209.0
267.161	1283.1	-104.4	-5511.9	182027.0	-3137670.0	3247.0
267.162	-1413.3	81.4	-7113.3	-96419.0	6347658.0	-4929.0
267.163	-1749.0	69.8	-6622.5	-77307.0	7651542.0	-7889.0
267.164	1412.9	42.9	-5784.6	-213935.0	-4027760.0	4625.0
267.165	1077.3	25.7	-6000.7	-181174.0	-2724851.0	1664.0
267.166	-1611.8	102.1	-16500.7	-227484.0	6729328.0	-6510.0
267.167	-1947.6	90.1	-16010.3	-207996.0	8032186.0	-9471.0
267.168	1604.5	-138.2	-6091.9	267375.0	-4365179.0	6202.0
267.169	1269.2	-162.8	-6276.1	313926.0	-3064194.0	3241.0
267.170	-1430.5	43.9	-4960.6	-18968.0	6436297.0	-4936.0
267.171	-1765.9	33.7	-4489.5	-1784.0	7738256.0	-7896.0
267.268	633.3	-38.0	-3376.5	-25956.0	-1456427.0	4173.0
267.269	-486.1	-105.0	-4301.0	96114.0	2890750.0	-5699.0
267.270	-60.0	92.8	-4750.0	-168461.0	1205787.0	855.0
267.271	-1178.6	43.7	-3938.8	-82688.0	5548166.0	-9012.0
267.272	851.3	-94.8	401.5	173517.0	-1936153.0	5764.0
267.273	-268.6	-161.6	84.6	297629.0	2412897.0	-4110.0
267.274	154.8	95.3	-2888.9	-86888.0	739766.6	2444.0
267.275	-964.2	46.6	-973.2	-2884.0	5083527.0	-7424.0
267.276	738.7	21.5	-2204.9	-106542.0	-1731703.0	4184.0
267.277	-380.3	-40.0	-2743.2	7992.0	2612575.0	-5689.0
267.278	-168.2	27.5	-5816.4	-87093.0	1493353.0	843.0
267.279	-1286.7	-25.7	-5201.3	7399.0	5834757.0	-9025.0
267.280	957.3	-32.3	-908.1	90456.0	-2215277.0	5775.0
267.281	-162.0	-98.8	-1134.0	212917.0	2131925.0	-4098.0
267.282	46.9	26.2	-1500.9	1248.0	1025892.0	2433.0
267.283	-1071.0	-20.0	422.4	81728.0	5365448.0	-7435.0
267.284	647.4	18.4	-5307.3	-154207.0	-1531852.0	4179.0
267.285	-472.1	-47.9	-6225.0	-32849.0	2815299.0	-5693.0
267.286	-45.5	157.1	-5420.3	-306703.0	1128464.0	862.0
267.287	-1163.6	93.6	-5525.0	-190812.0	5468969.0	-9006.0
267.288	835.9	-136.9	149.0	268335.0	-1855058.0	5756.0
267.289	-284.9	-192.1	167.6	365116.0	2497764.0	-4118.0
267.290	137.9	64.7	-2957.0	-19519.0	826768.6	2436.0
267.291	-981.2	10.5	-937.3	73418.0	5171217.0	-7433.0
267.292	753.4	82.2	-3737.0	-241091.0	-1809975.0	4191.0
267.293	-366.3	16.1	-4621.7	-119426.0	2538125.0	-5683.0
267.294	-153.5	90.8	-6637.8	-224073.0	1415080.0	850.0
267.295	-1271.7	26.1	-6440.9	-105809.0	5755561.0	-9019.0
267.296	941.7	-72.7	-1107.1	181437.0	-2133232.0	5767.0
267.297	-178.6	-128.7	-1037.9	279977.0	2217716.0	-4107.0
267.298	30.3	-4.2	-1577.4	67999.0	1111683.0	2425.0
267.299	-1087.5	-57.8	532.7	160934.0	5451265.0	-7443.0
272.1	9020.2	-151.1	-15064.7	276509.0	13557070.0	342.0
272.2	17923.5	-170.8	-19916.9	309270.0	24174500.0	1782.0
272.3	7767.6	-294.7	-26100.1	541419.0	18459480.0	-1699.0
272.4	16671.0	-315.0	-30956.4	575185.0	29066930.0	-259.0
272.5	6941.7	-116.0	-11603.5	212334.0	10424070.0	262.0
272.6	15845.1	-135.7	-16456.5	245015.0	21037520.0	1702.0
272.7	5689.2	-259.7	-22639.7	477324.0	15322500.0	-1779.0
272.8	14592.6	-280.0	-27499.2	511114.0	25929950.0	-339.0
272.9	26826.9	-190.7	-24779.8	342044.0	34781960.0	3221.0
272.10	8143.3	-251.6	-22790.3	461928.0	16994730.0	-1086.0



272.11	25950.2	-291.8	-32507.0	528440.0	38209670.0	1793.0
272.12	24748.5	-155.7	-21321.1	277976.0	31644980.0	3141.0
272.13	6064.9	-216.5	-19329.4	397793.0	13857760.0	-1166.0
272.14	23871.8	-256.8	-29049.4	464234.0	35072690.0	1713.0
272.15	17046.7	-271.7	-27639.9	495243.0	27602190.0	353.0
272.16	14968.3	-236.7	-24184.6	431218.0	24465210.0	273.0
272.17	5011.9	-142.2	-12865.8	261706.0	8789767.0	-307.0
272.18	13915.2	-162.1	-17714.1	294784.0	19398200.0	1133.0
272.19	3759.3	-285.8	-23900.9	526569.0	13693170.0	-2347.0
272.20	12662.6	-306.0	-28752.7	560273.0	24300600.0	-908.0
272.21	2933.4	-107.2	-9405.5	197598.0	5652764.0	-387.0
272.22	11836.7	-126.9	-14253.5	230518.0	16261200.0	1053.0
272.23	1680.9	-250.8	-20438.4	462436.0	10556190.0	-2427.0
272.24	10584.2	-271.0	-25292.4	496207.0	21163620.0	-988.0
272.25	22818.5	-181.7	-22569.6	327315.0	30005630.0	2572.0
272.26	4135.0	-242.6	-20588.7	446956.0	12218430.0	-1735.0
272.27	21941.8	-282.9	-30299.7	513677.0	33443340.0	1144.0
272.28	20740.1	-146.8	-19113.5	263214.0	26868650.0	2492.0
272.29	2056.6	-207.6	-17129.2	382928.0	9083451.0	-1815.0
272.30	19863.4	-247.9	-26842.5	449574.0	30306370.0	1064.0
272.31	2339.6	-136.4	-11401.9	251975.0	5609206.0	-739.0
272.32	11242.9	-156.3	-16246.6	285133.0	16220640.0	700.0
272.33	1462.8	-236.8	-19123.4	437144.0	9039893.0	-2168.0
272.34	10366.1	-256.8	-23972.3	470563.0	19648320.0	-728.0
272.35	261.2	-101.3	-7938.4	187669.0	2472227.0	-819.0
272.36	9164.5	-121.1	-12785.5	220894.0	13083660.0	620.0
272.37	-615.7	-201.8	-15665.0	373202.0	5902890.0	-2248.0
272.38	8287.7	-221.8	-20512.2	406513.0	16511350.0	-808.0
272.39	13038.4	-262.8	-25438.0	480481.0	22825890.0	-296.0
272.40	10960.0	-227.8	-21978.8	416465.0	19688910.0	-376.0
272.41	10623.5	-154.6	-15944.0	282436.0	15473590.0	602.0
272.42	19526.8	-174.3	-20798.3	315075.0	26081020.0	2041.0
272.43	9370.9	-298.3	-26982.8	547552.0	20365990.0	-1439.0
272.44	18274.4	-318.6	-31839.3	581108.0	30983480.0	0.4
272.45	8545.0	-119.5	-12482.3	218231.0	12336580.0	522.0
272.46	17448.4	-139.2	-17337.6	250814.0	22944040.0	1961.0
272.47	7292.5	-263.3	-23520.2	483331.0	17229010.0	-1519.0
272.48	16195.9	-283.6	-28382.8	516981.0	27846470.0	-80.0
272.49	28430.3	-194.2	-25664.1	347853.0	36688500.0	3481.0
272.50	9746.7	-255.2	-23670.3	467889.0	18901280.0	-827.0
272.51	27553.6	-295.4	-33390.1	534309.0	40116220.0	2052.0
272.52	26351.9	-159.3	-22205.7	283866.0	33551520.0	3401.0
272.53	7668.3	-220.1	-20209.7	403799.0	15764300.0	-907.0
272.54	25475.1	-260.4	-29933.0	470114.0	36979210.0	1972.0
272.55	18650.1	-275.2	-28522.6	501147.0	29508730.0	613.0
272.56	16571.7	-240.3	-25067.5	437129.0	26371750.0	533.0
272.57	11692.4	-157.0	-16530.2	286391.0	16744610.0	775.0
272.58	20595.7	-176.6	-21385.3	318928.0	27352040.0	2214.0
272.59	10815.6	-257.5	-24256.4	471833.0	20172300.0	-654.0
272.60	19719.0	-277.6	-29111.3	505103.0	30779750.0	786.0
272.61	9613.9	-121.9	-13068.6	222176.0	13607610.0	695.0
272.62	18517.3	-141.5	-17923.9	254660.0	24215060.0	2134.0
272.63	8737.2	-222.5	-20796.7	407804.0	17035320.0	-734.0
272.64	17640.6	-242.7	-25656.2	441059.0	27642780.0	706.0
272.108	5031.5	-211.6	-20686.7	315477.0	4226737.0	6303.0
272.109	7064.0	-311.7	-28139.5	514466.0	7531078.0	4125.0
272.110	2951.2	-39.2	-42541.7	113695.0	12568280.0	1777.0
272.111	4986.1	-144.0	-47655.1	320485.0	15864230.0	-403.0
272.112	7891.7	-91.9	8148.0	122523.0	8928941.0	-705.0
272.113	9923.4	-184.6	127.5	310072.0	12237080.0	-2883.0

272.114	5814.1	199.4	-22299.7	-309105.0	17264170.0	-5229.0
272.115	7847.7	104.4	-27700.4	-117623.0	20569780.0	-7409.0
272.116	4997.4	-53.2	-22167.9	77849.0	5040091.0	5864.0
272.117	7028.1	-153.4	-29635.3	277185.0	8351975.0	3686.0
272.118	2984.8	-229.4	-36354.8	386723.0	11756800.0	2219.0
272.119	5019.3	-331.6	-43002.0	590598.0	15052640.0	39.0
272.120	7857.8	69.7	6530.0	-121047.0	9740345.0	-1145.0
272.121	9889.5	-24.0	-1488.5	67777.0	13047480.0	-3323.0
272.122	5853.2	31.9	-14404.5	-64245.0	16434080.0	-4790.0
272.123	7886.9	-63.6	-19745.3	128346.0	19729720.0	-6969.0
272.124	5030.9	-176.3	-35169.4	242143.0	4101585.0	6203.0
272.125	7063.4	-276.5	-42579.7	441612.0	7406925.0	4025.0
272.126	2949.7	21.4	-49252.1	1803.0	12447900.0	1677.0
272.127	4982.3	-96.3	-55416.2	226329.0	15753260.0	-502.0
272.128	7898.3	73.6	18921.8	-171272.0	9040614.0	-598.0
272.129	9929.6	-18.8	10924.0	15156.0	12351650.0	-2777.0
272.130	5818.7	333.7	-20117.9	-559800.0	17385330.0	-5123.0
272.131	7852.0	239.3	-25559.8	-369396.0	20690880.0	-7303.0
272.132	4994.2	-18.9	-36613.0	6643.0	4924280.0	5764.0
272.133	7025.5	-118.7	-44016.5	206443.0	8234316.0	3585.0
272.134	2983.9	-150.6	-46976.0	252447.0	11636570.0	2117.0
272.135	5018.1	-254.7	-54139.4	458822.0	14932340.0	-62.0
272.136	7857.7	204.1	14767.4	-371388.0	9881320.0	-1037.0
272.137	9891.0	119.5	7957.5	-195624.0	13177860.0	-3216.0
272.138	5856.5	170.2	-12245.6	-319868.0	16554920.0	-4682.0
272.139	7890.8	74.6	-17566.6	-127528.0	19860710.0	-6862.0
272.140	8463.5	-444.5	6071.2	625843.0	-3866080.0	9120.0
272.141	10495.1	-549.8	-1651.7	836912.0	-556967.4	6941.0
272.142	1511.1	307.3	-87814.8	-378621.0	24033140.0	-5963.0
272.143	3545.9	213.2	-92931.2	-191726.0	27329060.0	-8142.0
272.144	9315.4	-432.9	15393.1	616610.0	-2431081.0	7016.0
272.145	11347.0	-538.4	7664.5	828017.0	878031.8	4837.0
272.146	2373.4	410.9	-81823.8	-565658.0	25431780.0	-8063.0
272.147	4408.2	316.8	-86939.6	-378821.0	28727700.0	-10243.0
272.148	8464.2	-433.6	1798.8	601908.0	-3907902.0	9090.0
272.149	10496.9	-533.1	-5673.1	799592.0	-603511.1	6911.0
272.150	1506.9	266.8	-88640.6	-303045.0	24012080.0	-5995.0
272.151	3542.2	173.2	-93717.3	-116958.0	27308120.0	-8175.0
272.152	9314.4	-434.6	19805.0	625303.0	-2386334.0	7046.0
272.153	11345.4	-540.6	12055.6	837453.0	924626.3	4867.0
272.154	2376.1	449.6	-81132.7	-637925.0	25462460.0	-8031.0
272.155	4410.7	354.7	-86280.3	-448877.0	28758330.0	-10211.0
272.156	8352.6	84.4	1066.5	-167374.0	-1165198.0	7656.0
272.157	10383.3	-21.8	-6693.0	45084.0	2146981.0	5477.0
272.158	1639.1	-240.8	-61867.6	422957.0	21255590.0	-4494.0
272.159	3674.6	-334.7	-66939.3	609238.0	24551700.0	-6673.0
272.160	9203.7	95.6	10309.3	-176269.0	273598.1	5551.0
272.161	11234.4	-10.6	2549.8	36192.0	3586121.0	3372.0
272.162	2501.2	-138.3	-55807.5	238356.0	22654180.0	-6594.0
272.163	4536.7	-231.8	-60871.5	424130.0	25950280.0	-8774.0
272.164	8354.6	97.3	-3046.7	-195865.0	-1212691.0	7626.0
272.165	10386.3	-3.2	-10565.4	3613.0	2095222.0	5448.0
272.166	1636.4	-279.4	-62653.6	494827.0	21234910.0	-4526.0
272.167	3671.5	-375.2	-67765.9	683780.0	24520910.0	-6706.0
272.168	9200.6	92.5	14608.4	-165554.0	326812.1	5580.0
272.169	11231.3	-13.6	6848.8	46907.0	3639128.0	3401.0
272.170	2506.0	-97.6	-54896.1	162673.0	22675400.0	-6561.0
272.171	4540.8	-191.8	-60014.7	349846.0	25971320.0	-8741.0
272.268	3664.4	-102.2	-1206.7	103451.0	2000109.0	6390.0
272.269	10438.3	-433.4	-26103.8	762603.0	13016630.0	-871.0

272.270	1574.9	94.3	-29443.8	-140903.0	10383320.0	1865.0
272.271	8358.3	-236.4	-46381.7	512735.0	21369250.0	-5400.0
272.272	4520.3	-88.7	8391.2	86536.0	3418122.0	4286.0
272.273	11291.7	-420.6	-17947.3	754368.0	14453010.0	-2975.0
272.274	2437.2	184.1	-23256.7	-303598.0	11777950.0	-236.0
272.275	9218.7	-138.6	-40718.6	342504.0	22767400.0	-7501.0
272.276	3632.1	57.6	-2635.1	-136625.0	2805919.0	5951.0
272.277	10402.3	-275.0	-27600.8	525654.0	13847500.0	-1310.0
272.278	1614.2	-64.5	-21673.3	88979.0	9548280.0	2306.0
272.279	8394.3	-408.8	-41265.2	764954.0	20548380.0	-4959.0
272.280	4486.2	69.5	6833.2	-150745.0	4232476.0	3847.0
272.281	11258.1	-260.3	-19520.3	512552.0	15264490.0	-3415.0
272.282	2476.1	19.3	-15407.3	-61958.0	10947820.0	205.0
272.283	9257.9	-298.5	-33665.2	576799.0	21937340.0	-7061.0
272.284	3664.4	-92.1	-5553.7	82153.0	1961109.0	6359.0
272.285	10438.0	-422.9	-30441.0	740921.0	12986560.0	-901.0
272.286	1576.0	108.5	-30454.3	-166236.0	10338600.0	1834.0
272.287	8357.6	-242.2	-47287.7	524837.0	21329070.0	-5431.0
272.288	4520.1	-61.5	12065.3	40414.0	3460072.0	4317.0
272.289	11293.4	-371.0	-14694.3	665954.0	14483440.0	-2943.0
272.290	2439.2	226.6	-22448.5	-383799.0	11808460.0	-204.0
272.291	9220.1	-98.2	-40050.7	267599.0	22807760.0	-7469.0
272.292	3630.4	66.4	-7034.2	-156034.0	2773488.0	5920.0
272.293	10403.0	-264.1	-31905.6	503636.0	13797680.0	-1341.0
272.294	1613.9	-57.0	-22769.7	72924.0	9509205.0	2275.0
272.295	8393.6	-408.2	-43595.7	765902.0	20508200.0	-4990.0
272.296	4486.2	100.0	10452.1	-203181.0	4272476.0	3878.0
272.297	11259.4	-210.1	-16269.8	423507.0	15294820.0	-3383.0
272.298	2478.2	61.9	-14586.0	-142856.0	10978350.0	237.0
272.299	9258.2	-268.2	-32204.8	516481.0	21977420.0	-7028.0
274.1	-448.4	-57.2	-3035.6	66237.0	4879308.0	-2579.0
274.2	-1531.1	-71.2	-3553.2	82127.0	10961790.0	-2025.0
274.3	-796.3	-102.2	-5505.2	110366.0	6229098.0	-7044.0
274.4	-1879.0	-116.5	-6023.6	126795.0	12303580.0	-6490.0
274.5	-344.7	-43.7	-2335.7	50690.0	3749601.0	-1985.0
274.6	-1427.5	-57.7	-2853.4	66515.0	9828057.0	-1430.0
274.7	-692.6	-88.8	-4805.4	94890.0	5100392.0	-6449.0
274.8	-1775.3	-103.1	-5324.1	111238.0	11179870.0	-5895.0
274.9	-2613.9	-85.1	-4071.9	97687.0	17037250.0	-1470.0
274.10	-691.9	-88.7	-4764.2	97108.0	5824569.0	-5705.0
274.11	-2857.4	-116.9	-5801.7	128988.0	17975510.0	-4596.0
274.12	-2510.2	-71.6	-3372.5	82086.0	15903540.0	-876.0
274.13	-588.2	-75.3	-4064.4	81610.0	4694862.0	-5110.0
274.14	-2753.7	-103.3	-5102.0	113337.0	16851800.0	-4001.0
274.15	-1774.7	-102.9	-5282.4	113250.0	11900030.0	-5150.0
274.16	-1671.0	-89.4	-4582.8	97770.0	10776320.0	-4556.0
274.17	38.7	-50.8	-2802.8	58741.0	2144812.0	-2831.0
274.18	-1044.1	-65.0	-3320.0	75002.0	8222269.0	-2277.0
274.19	-309.2	-95.9	-5272.0	102947.0	3494602.0	-7296.0
274.20	-1391.9	-110.2	-5789.9	119491.0	9573084.0	-6742.0
274.21	142.4	-37.3	-2102.9	43230.0	1015555.0	-2236.0
274.22	-940.4	-51.5	-2620.1	59394.0	7093562.0	-1682.0
274.23	-205.5	-82.4	-4572.4	87338.0	2365896.0	-6701.0
274.24	-1288.3	-96.8	-5090.2	103993.0	8443352.0	-6147.0
274.25	-2126.8	-78.8	-3838.1	90553.0	14300750.0	-1722.0
274.26	-204.8	-82.3	-4531.2	89559.0	3090073.0	-5957.0
274.27	-2370.3	-110.6	-5567.8	121859.0	15249010.0	-4848.0
274.28	-2023.1	-65.3	-3138.6	74980.0	13167040.0	-1128.0
274.29	-101.1	-68.9	-3831.3	74153.0	1960366.0	-5362.0
274.30	-2266.6	-97.1	-4868.3	106279.0	14115300.0	-4253.0

274.31	363.5	-46.6	-2647.6	53840.0	321738.4	-2999.0
274.32	-719.3	-60.8	-3164.6	70233.0	6399622.0	-2445.0
274.33	119.9	-78.1	-4375.7	84668.0	1267401.0	-6125.0
274.34	-962.9	-92.3	-4893.3	101110.0	7344857.0	-5570.0
274.35	467.1	-33.0	-1947.7	38149.0	-807425.8	-2404.0
274.36	-615.7	-47.3	-2464.7	54646.0	5270890.0	-1850.0
274.37	223.6	-64.7	-3675.8	69332.0	137880.8	-5530.0
274.38	-859.2	-78.9	-4193.5	85661.0	6215150.0	-4975.0
274.39	-1287.6	-96.6	-5048.9	106011.0	9167529.0	-5402.0
274.40	-1183.9	-83.2	-4349.1	90588.0	8038822.0	-4807.0
274.41	-643.2	-59.7	-3128.8	69198.0	5972917.0	-2479.0
274.42	-1726.0	-73.7	-3646.5	84973.0	12052370.0	-1924.0
274.43	-991.1	-104.9	-5598.5	113486.0	7322706.0	-6944.0
274.44	-2073.9	-119.1	-6117.1	129665.0	13404160.0	-6389.0
274.45	-539.5	-46.2	-2428.9	53632.0	4844210.0	-1884.0
274.46	-1622.3	-60.2	-2946.7	69339.0	10918670.0	-1329.0
274.47	-887.4	-91.4	-4898.7	97884.0	6194000.0	-6349.0
274.48	-1970.2	-105.6	-5417.5	114084.0	12270460.0	-5794.0
274.49	-2808.7	-87.5	-4165.4	100487.0	18127850.0	-1370.0
274.50	-886.7	-91.3	-4857.5	100095.0	6918178.0	-5604.0
274.51	-3052.2	-119.4	-5895.2	131821.0	19076110.0	-4495.0
274.52	-2705.1	-74.1	-3466.0	84949.0	17004120.0	-775.0
274.53	-783.1	-77.8	-4157.7	84624.0	5789445.0	-5009.0
274.54	-2948.6	-105.8	-5195.5	116175.0	17942380.0	-3900.0
274.55	-1969.5	-105.4	-5375.9	116119.0	13000630.0	-5050.0
274.56	-1865.8	-91.9	-4676.3	100633.0	11866930.0	-4455.0
274.57	-773.1	-61.4	-3191.0	71164.0	6701981.0	-2411.0
274.58	-1855.9	-75.3	-3708.8	86847.0	12779440.0	-1857.0
274.59	-1016.6	-93.0	-4919.7	102052.0	7647242.0	-5537.0
274.60	-2099.4	-107.0	-5438.3	118037.0	13727700.0	-4982.0
274.61	-669.4	-47.9	-2491.1	55593.0	5573274.0	-1817.0
274.62	-1752.2	-61.8	-3009.0	71175.0	11645730.0	-1262.0
274.63	-913.0	-79.5	-4219.9	86624.0	6518509.0	-4942.0
274.64	-1995.7	-93.6	-4738.7	102539.0	12593990.0	-4388.0
274.108	587.9	-114.3	-8051.8	-104708.0	362258.0	1841.0
274.109	227.1	-149.3	-8869.6	-50401.0	1345581.0	-165.0
274.110	-338.0	232.6	-8615.8	-599976.0	3823300.0	-2711.0
274.111	-698.0	196.6	-7819.2	-540568.0	4804023.0	-4717.0
274.112	-272.9	-241.2	-7190.1	531969.0	3784806.0	-2835.0
274.113	-634.0	-274.7	-7187.3	583137.0	4770249.0	-4842.0
274.114	-1199.5	139.4	-10159.6	-62208.0	7244867.0	-7392.0
274.115	-1560.0	105.9	-9365.0	-7797.0	8226462.0	-9398.0
274.116	520.4	14.3	-5314.3	-296582.0	620970.4	1155.0
274.117	159.0	-16.7	-5981.3	-248445.0	1607315.0	-851.0
274.118	-270.6	72.0	-5297.5	-363229.0	3566390.0	-2023.0
274.119	-630.9	38.7	-6128.9	-308991.0	4547035.0	-4030.0
274.120	-340.4	-111.1	-3773.6	336495.0	4042692.0	-3521.0
274.121	-701.4	-145.1	-3771.0	388125.0	5028160.0	-5528.0
274.122	-1129.9	-0.6	-5625.5	148664.0	6977514.0	-6701.0
274.123	-1490.3	-33.9	-4827.3	203097.0	7960135.0	-8708.0
274.124	587.6	205.3	-10455.4	-737819.0	313984.0	1665.0
274.125	227.0	171.3	-11275.9	-684711.0	1297556.0	-341.0
274.126	-338.0	550.7	-6184.6	-1226000.0	3776300.0	-2885.0
274.127	-698.8	505.9	-5843.7	-1154000.0	4759819.0	-4892.0
274.128	-273.4	-457.8	-5862.3	952523.1	3829679.0	-2662.0
274.129	-634.7	-491.4	-5860.6	1003000.0	4815072.0	-4669.0
274.130	-1200.9	-83.5	-12667.8	358955.0	7292512.0	-7220.0
274.131	-1561.5	-116.8	-11875.1	413058.0	8275082.0	-9227.0
274.132	519.6	338.9	-7533.6	-937272.0	576305.6	980.0
274.133	158.4	308.3	-8250.9	-888357.0	1562162.0	-1027.0

274.134	-270.7	406.1	-7718.0	-1015000.0	3517364.0	-2200.0
274.135	-631.1	372.2	-8552.4	-960328.0	4498985.0	-4207.0
274.136	-343.1	-350.7	-5173.7	787925.0	4098007.0	-3350.0
274.137	-703.5	-378.2	-3928.9	831224.0	5080628.0	-5356.0
274.138	-1131.6	-224.0	-8382.1	571132.0	7028083.0	-6530.0
274.139	-1491.9	-255.0	-7339.9	622167.0	8008729.0	-8536.0
274.140	1366.4	-539.0	-23013.4	687370.0	-2482549.0	5502.0
274.141	1005.5	-579.9	-23010.5	753443.0	-1498056.0	3496.0
274.142	-1728.7	614.5	-30419.3	-1036000.0	9086688.0	-9686.0
274.143	-2088.8	585.8	-29614.3	-990490.1	10070380.0	-11692.0
274.144	1106.5	-596.7	-23167.3	918663.9	-1447447.0	4097.0
274.145	745.5	-637.7	-23164.5	985041.0	-462698.5	2091.0
274.146	-1986.1	603.9	-30875.0	-911762.0	10106420.0	-11088.0
274.147	-2346.2	575.2	-30070.1	-866509.9	11085120.0	-13094.0
274.148	1366.8	-440.3	-23410.3	492063.0	-2498448.0	5450.0
274.149	1006.1	-474.9	-23407.9	545302.0	-1514903.0	3445.0
274.150	-1729.4	681.6	-29669.1	-1162000.0	9076511.0	-9740.0
274.151	-2089.3	653.0	-28863.6	-1117000.0	10060260.0	-11745.0
274.152	1105.9	-690.7	-22770.3	1106000.0	-1430599.0	4148.0
274.153	744.7	-731.7	-22767.5	1172000.0	-445224.3	2142.0
274.154	-1985.9	536.1	-31626.8	-783883.0	10116480.0	-11035.0
274.155	-2346.1	506.1	-30822.2	-736099.0	11105150.0	-13041.0
274.156	1142.1	-111.5	-11627.2	48753.0	-1624421.0	3218.0
274.157	780.8	-152.5	-11624.3	115223.0	-637930.1	1211.0
274.158	-1498.4	151.1	-15334.6	-336707.0	8202081.0	-7390.0
274.159	-1858.3	122.1	-14530.9	-291322.0	9181828.0	-9395.0
274.160	881.8	-169.4	-11781.3	279934.0	-587732.6	1811.0
274.161	520.6	-210.4	-11778.5	346406.0	398450.2	-195.0
274.162	-1755.8	140.3	-15789.4	-211364.0	9223817.0	-8791.0
274.163	-2115.7	111.6	-14983.8	-166383.0	10203560.0	-10797.0
274.164	1142.8	-10.6	-12024.0	-150941.0	-1642243.0	3167.0
274.165	781.9	-45.4	-12021.7	-96912.0	-657042.3	1160.0
274.166	-1498.7	218.4	-14583.8	-464308.0	8190005.0	-7443.0
274.167	-1858.7	188.0	-13790.8	-416788.0	9170727.0	-9449.0
274.168	880.5	-263.4	-11384.7	467405.0	-568166.2	1861.0
274.169	519.3	-304.4	-11381.9	533878.0	418016.5	-146.0
274.170	-1754.9	73.1	-16538.5	-84952.0	9233045.0	-8737.0
274.171	-2115.0	44.2	-15733.5	-39338.0	10213740.0	-10743.0
274.268	709.1	-129.1	-6861.6	85175.0	406582.3	2547.0
274.269	-493.7	-251.4	-8013.7	273234.0	3686822.0	-4140.0
274.270	-220.2	200.3	-10106.0	-395906.0	3882168.0	-2010.0
274.271	-1420.2	93.5	-7437.1	-223896.0	7148909.0	-8696.0
274.272	450.5	-182.7	-7016.1	306273.0	1436224.0	1144.0
274.273	-753.3	-307.0	-7008.3	502976.0	4720001.0	-5545.0
274.274	-477.6	183.5	-10564.3	-258936.0	4903905.0	-3412.0
274.275	-1678.3	74.3	-7887.1	-81302.0	8173467.0	-10100.0
274.276	642.1	-0.3	-3446.3	-107652.0	662805.4	1862.0
274.277	-561.9	-118.5	-5154.5	75594.0	3948530.0	-4826.0
274.278	-150.9	64.2	-5580.9	-192518.0	3615740.0	-1320.0
274.279	-1352.1	-51.5	-5573.5	-8339.0	6888175.0	-8009.0
274.280	382.9	-54.5	-3600.4	114692.0	1695084.0	458.0
274.281	-820.6	-175.8	-3924.6	305878.0	4977937.0	-6231.0
274.282	-408.3	43.9	-6037.9	-47790.0	4637476.0	-2722.0
274.283	-1608.8	-59.9	-4347.4	120508.0	7907089.0	-9410.0
274.284	709.2	-32.3	-7259.9	-106298.0	391719.7	2494.0
274.285	-493.7	-155.4	-8746.5	83148.0	3672822.0	-4192.0
274.286	-219.5	298.3	-9343.3	-585155.0	3865346.0	-2061.0
274.287	-1420.1	178.0	-6687.2	-386788.0	7134934.0	-8749.0
274.288	449.9	-259.9	-6618.6	458253.0	1452072.0	1195.0
274.289	-753.5	-372.2	-6609.2	629064.0	4733950.0	-5494.0



274.290	-477.7	120.0	-11313.8	-138660.0	4917880.0	-3360.0
274.291	-1678.7	7.3	-8639.8	45638.0	8187366.0	-10048.0
274.292	641.8	96.3	-3845.9	-298473.0	650274.4	1809.0
274.293	-561.6	-22.8	-5939.0	-113337.0	3933606.0	-4879.0
274.294	-150.6	156.8	-4853.5	-374186.0	3600815.0	-1372.0
274.295	-1352.1	37.3	-6298.4	-180757.0	6873175.0	-8062.0
274.296	382.3	-129.9	-3202.8	262886.0	1710932.0	509.0
274.297	-820.9	-241.2	-3353.7	432339.0	4992861.0	-6179.0
274.298	-408.4	-19.2	-6786.9	71327.0	4651450.0	-2670.0
274.299	-1609.4	-135.2	-4131.5	260726.0	7922937.0	-9358.0
276.1	-437.1	56.0	-3142.2	-64777.0	4847174.0	2588.0
276.2	-1517.0	69.0	-3676.4	-78671.0	10925370.0	2050.0
276.3	-777.2	102.4	-5656.5	-111060.0	6171941.0	7050.0
276.4	-1857.2	115.1	-6190.6	-124377.0	12249110.0	6512.0
276.5	-336.0	42.8	-2417.8	-49608.0	3725807.0	1991.0
276.6	-1416.0	55.9	-2951.9	-63592.0	9800973.0	1453.0
276.7	-676.2	89.2	-4932.0	-95824.0	5050550.0	6454.0
276.8	-1756.2	102.0	-5466.0	-109272.0	11124720.0	5915.0
276.9	-2597.0	82.3	-4210.2	-93003.0	16991530.0	1512.0
276.10	-675.1	88.5	-4902.3	-97198.0	5774829.0	5712.0
276.11	-2835.1	114.5	-5970.1	-125013.0	17921160.0	4635.0
276.12	-2496.0	69.2	-3485.8	-77961.0	15877140.0	915.0
276.13	-574.1	75.3	-4177.9	-81983.0	4653437.0	5115.0
276.14	-2734.1	101.5	-5245.9	-110012.0	16796770.0	4039.0
276.15	-1755.1	101.3	-5436.3	-110759.0	11845000.0	5173.0
276.16	-1654.1	88.2	-4711.8	-95598.0	10730600.0	4577.0
276.17	48.8	50.3	-2901.8	-58816.0	2114373.0	2833.0
276.18	-1031.2	63.1	-3436.0	-72252.0	8188539.0	2295.0
276.19	-291.3	96.7	-5416.1	-105027.0	3439141.0	7295.0
276.20	-1371.3	109.4	-5950.3	-118160.0	9513307.0	6757.0
276.21	149.8	37.2	-2177.4	-43621.0	992572.9	2236.0
276.22	-930.2	50.0	-2711.6	-57164.0	7067148.0	1698.0
276.23	-190.3	83.6	-4691.7	-89914.0	2317750.0	6698.0
276.24	-1270.3	96.2	-5225.8	-102953.0	8391916.0	6160.0
276.25	-2111.1	76.4	-3970.0	-86556.0	14264730.0	1756.0
276.26	-189.3	82.9	-4661.9	-91277.0	3042003.0	5956.0
276.27	-2349.3	108.7	-5729.8	-118543.0	15194330.0	4880.0
276.28	-2010.1	63.3	-3245.5	-71463.0	13140340.0	1160.0
276.29	-88.3	69.6	-3937.4	-75980.0	1919612.0	5360.0
276.30	-2248.3	95.6	-5005.4	-103468.0	14069940.0	4283.0
276.31	372.7	46.5	-2741.6	-54768.0	292323.1	2996.0
276.32	-707.3	59.2	-3275.8	-68005.0	6366664.0	2458.0
276.33	134.6	79.0	-4501.6	-87208.0	1220128.0	6119.0
276.34	-945.3	91.7	-5035.8	-100417.0	7294320.0	5581.0
276.35	473.7	33.5	-2017.3	-39733.0	-829338.4	2399.0
276.36	-606.2	46.1	-2551.3	-52884.0	5244298.0	1861.0
276.37	235.6	65.8	-3777.2	-71852.0	98154.4	5523.0
276.38	-844.3	78.5	-4311.3	-85158.0	6171928.0	4985.0
276.39	-1269.3	95.5	-5196.0	-104482.0	9116169.0	5418.0
276.40	-1168.2	82.3	-4471.6	-89207.0	7994803.0	4821.0
276.41	-631.4	58.3	-3238.4	-67198.0	5939909.0	2490.0
276.42	-1711.4	71.4	-3772.5	-81247.0	12016070.0	1952.0
276.43	-971.5	104.6	-5752.7	-113342.0	7265676.0	6952.0
276.44	-2051.5	117.5	-6286.7	-126944.0	13339840.0	6414.0
276.45	-530.4	45.1	-2514.0	-52046.0	4818517.0	1893.0
276.46	-1610.4	58.3	-3048.0	-66186.0	10891680.0	1355.0
276.47	-870.5	91.5	-5028.1	-98219.0	6144285.0	6356.0
276.48	-1950.5	104.4	-5562.2	-111859.0	12215450.0	5817.0
276.49	-2791.4	84.6	-4306.4	-95631.0	18092240.0	1414.0
276.50	-869.5	90.7	-4998.5	-99596.0	6867539.0	5614.0

276.51	-3029.5	116.9	-6066.3	-127623.0	19011870.0	4537.0
276.52	-2690.4	71.5	-3581.9	-80541.0	16967850.0	817.0
276.53	-768.5	77.6	-4273.9	-84355.0	5746147.0	5017.0
276.54	-2928.5	103.9	-5342.0	-112617.0	17897480.0	3941.0
276.55	-1949.5	103.7	-5532.4	-113326.0	12945700.0	5075.0
276.56	-1848.5	90.5	-4807.9	-98173.0	11821310.0	4479.0
276.57	-761.0	59.8	-3302.5	-68819.0	6669049.0	2425.0
276.58	-1840.9	72.9	-3836.6	-82982.0	12743240.0	1887.0
276.59	-999.0	92.3	-5062.6	-101223.0	7596704.0	5548.0
276.60	-2079.0	105.2	-5596.5	-115034.0	13672870.0	5010.0
276.61	-659.9	46.6	-2578.1	-53676.0	5547683.0	1828.0
276.62	-1739.9	59.9	-3112.1	-67950.0	11618850.0	1290.0
276.63	-898.0	79.1	-4338.0	-85947.0	6475312.0	4952.0
276.64	-1978.0	92.1	-4872.0	-99894.0	12548480.0	4414.0
276.108	-352.5	278.8	-3546.6	-726532.0	4223624.0	3510.0
276.109	-711.2	311.9	-3516.4	-676373.0	5146676.0	5511.0
276.110	-1132.7	77.3	-5713.2	-358524.0	7121804.0	6678.0
276.111	-1491.2	110.6	-4975.1	-312000.0	8044906.0	8680.0
276.112	539.8	114.2	-5517.8	-17490.0	493414.3	-1108.0
276.113	180.5	150.0	-6211.1	26023.0	1419766.0	894.0
276.114	-244.5	5.4	-5746.1	159830.0	3412007.0	2061.0
276.115	-602.9	43.5	-6596.2	197225.0	4334135.0	4063.0
276.116	-284.8	410.3	-6999.0	-925301.0	3963789.0	2827.0
276.117	-643.6	442.5	-6969.1	-874044.1	4887815.0	4828.0
276.118	-1202.6	-62.3	-10277.2	-148977.0	7390081.0	7366.0
276.119	-1561.2	-28.9	-9539.9	-102279.0	8313158.0	9368.0
276.120	607.4	246.7	-8269.4	-217323.0	234560.3	-1791.0
276.121	248.7	286.9	-9109.8	-180383.0	1158058.0	211.0
276.122	-311.8	-156.9	-8419.9	402407.0	3669943.0	2746.0
276.123	-670.0	-115.8	-7676.9	434212.0	4591122.0	4747.0
276.124	-341.7	649.8	-5069.1	-1445000.0	4081362.0	3339.0
276.125	-700.0	683.7	-3493.7	-1397000.0	5003515.0	5340.0
276.126	-1120.2	437.0	-8847.9	-1059000.0	6972974.0	6504.0
276.127	-1478.9	469.4	-8111.0	-1011000.0	7896025.0	8506.0
276.128	518.9	-93.7	-7873.2	387610.0	679344.1	-922.0
276.129	160.3	-55.0	-8743.6	424710.0	1601644.0	1080.0
276.130	-265.3	-204.3	-8461.1	565069.0	3595733.0	2250.0
276.131	-623.6	-166.4	-9305.8	602558.0	4516887.0	4252.0
276.132	-272.4	768.3	-5159.0	-1627000.0	3814933.0	2654.0
276.133	-631.3	801.5	-5129.2	-1577000.0	4737934.0	4656.0
276.134	-1190.1	298.2	-13413.1	-849575.0	7240250.0	7192.0
276.135	-1548.7	331.1	-12675.8	-802055.0	8163328.0	9195.0
276.136	586.9	44.8	-10838.5	178115.0	416430.5	-1604.0
276.137	228.6	84.9	-11694.3	214988.0	1338962.0	396.0
276.138	-332.7	-343.2	-5735.8	769864.0	3854644.0	2932.0
276.139	-691.0	-304.8	-6587.0	806923.0	4776797.0	4934.0
276.140	869.7	409.1	-11560.9	-816205.0	-470555.6	-1787.0
276.141	511.2	437.2	-11530.3	-755569.0	452047.8	214.0
276.142	-1739.0	-144.0	-15598.5	171513.0	9226077.0	8778.0
276.143	-2097.3	-101.0	-14848.5	198642.0	10148230.0	10780.0
276.144	1139.0	326.4	-11522.4	-541839.0	-1598207.0	-3174.0
276.145	780.4	354.4	-11491.8	-480950.0	-675226.6	-1173.0
276.146	-1472.9	-142.8	-15043.4	278335.0	8115546.0	7393.0
276.147	-1831.3	-99.3	-14296.9	304762.0	9036674.0	9395.0
276.148	873.4	518.3	-11008.9	-1030000.0	-515130.5	-1839.0
276.149	514.7	552.0	-10978.3	-980863.9	408609.2	162.0
276.150	-1732.9	-82.3	-16531.2	53169.0	9170623.0	8722.0
276.151	-2091.4	-39.2	-15781.7	80062.0	10089730.0	10724.0
276.152	1134.7	218.2	-12074.3	-330762.0	-1551297.0	-3120.0
276.153	776.4	246.4	-12043.6	-270056.0	-629782.8	-1120.0

276.154	-1478.6	-204.9	-14111.0	397971.0	8168101.0	7449.0
276.155	-1837.0	-160.6	-13376.1	423808.0	9090229.0	9450.0
276.156	1094.3	844.4	-23068.7	-1472000.0	-1330540.0	-4063.0
276.157	736.1	872.6	-23038.0	-1411000.0	-409215.8	-2063.0
276.158	-1969.1	-618.4	-30791.8	893226.9	10110730.0	11066.0
276.159	-2327.7	-575.4	-30042.5	920067.0	11029810.0	13068.0
276.160	1363.8	760.7	-23030.4	-1195000.0	-2459209.0	-5449.0
276.161	1005.5	789.0	-22999.7	-1134000.0	-1537056.0	-3449.0
276.162	-1702.9	-617.0	-30235.3	998873.1	8999230.0	9680.0
276.163	-2061.4	-574.0	-29485.9	1026000.0	9917332.0	11682.0
276.164	1097.8	956.6	-22516.6	-1693000.0	-1373653.0	-4115.0
276.165	739.4	990.1	-22485.9	-1643000.0	-451379.2	-2114.0
276.166	-1963.5	-556.7	-31726.6	775225.0	10052160.0	11011.0
276.167	-2322.1	-513.7	-30977.5	802120.0	10981230.0	13013.0
276.168	1360.1	652.0	-23582.2	-981645.0	-2415147.0	-5397.0
276.169	1001.9	680.2	-23551.5	-920954.0	-1493968.0	-3397.0
276.170	-1709.1	-678.7	-29302.7	1116000.0	9055658.0	9736.0
276.171	-2067.4	-635.8	-28552.6	1144000.0	9975811.0	11738.0
276.268	380.5	143.8	-3538.0	-462903.0	1831476.0	-445.0
276.269	-815.1	253.6	-3847.2	-295094.0	4909331.0	6226.0
276.270	-400.9	-54.4	-5932.9	-100962.0	4735352.0	2723.0
276.271	-1595.7	72.4	-4372.5	21119.0	7808410.0	9396.0
276.272	649.2	66.6	-3500.2	-199218.0	707971.6	-1830.0
276.273	-547.0	181.5	-5249.0	-37636.0	3788308.0	4840.0
276.274	-134.9	-64.5	-5383.7	28379.0	3624796.0	1339.0
276.275	-1330.0	75.6	-5852.5	131520.0	6699778.0	8012.0
276.276	447.7	275.3	-6990.3	-661632.0	1575514.0	-1127.0
276.277	-747.7	386.8	-6890.3	-495832.0	4651421.0	5543.0
276.278	-470.3	-192.3	-10491.7	106942.0	5002756.0	3410.0
276.279	-1665.1	-67.5	-7999.7	233519.0	8074814.0	10083.0
276.280	716.8	196.6	-6952.3	-394377.0	448815.6	-2513.0
276.281	-478.8	318.2	-8111.8	-242992.0	3526601.0	4156.0
276.282	-204.0	-207.7	-9937.1	245614.0	3890276.0	2025.0
276.283	-1398.1	-70.3	-7446.1	349604.0	6961512.0	8697.0
276.284	384.3	251.2	-2986.6	-673336.0	1786439.0	-496.0
276.285	-811.5	361.1	-3174.7	-505548.0	4865244.0	6175.0
276.286	-396.7	51.6	-6865.6	-306499.0	4689417.0	2670.0
276.287	-1591.1	166.1	-4400.0	-157835.0	7760577.0	9342.0
276.288	644.2	-14.8	-4050.6	-39799.0	757584.9	-1776.0
276.289	-552.7	121.2	-6082.7	79942.0	3840863.0	4896.0
276.290	-141.0	-121.2	-4480.9	138680.0	3680250.0	1395.0
276.291	-1336.2	12.7	-6668.0	253473.0	6755206.0	8069.0
276.292	451.9	383.1	-6438.2	-872708.0	1527579.0	-1180.0
276.293	-744.0	494.5	-6337.1	-706649.0	4606359.0	5492.0
276.294	-466.0	-86.9	-11420.9	-97944.0	4955846.0	3357.0
276.295	-1660.6	25.0	-8943.8	54338.0	8026955.0	10030.0
276.296	711.7	118.0	-7502.0	-240384.0	498971.5	-2459.0
276.297	-484.7	257.7	-8898.5	-124371.0	3581104.0	4212.0
276.298	-209.8	-268.2	-9003.9	361097.0	3943805.0	2081.0
276.299	-1404.0	-132.7	-6523.9	469877.0	7015016.0	8752.0
354.1	25.4	26.8	-177.8	-51333.0	1250440.0	2042.0
354.2	-573.6	29.7	-173.8	-57162.0	2795564.0	3745.0
354.3	-445.3	53.1	-184.9	-102684.0	3399094.0	2203.0
354.4	-1044.2	55.3	-195.9	-107421.0	4945243.0	3906.0
354.5	19.9	20.6	-141.4	-39454.0	957323.6	1570.0
354.6	-579.0	23.6	-138.2	-45353.0	2502195.0	3273.0
354.7	-450.7	46.8	-148.6	-90664.0	3106725.0	1731.0
354.8	-1049.6	49.0	-165.3	-95403.0	4651874.0	3434.0
354.9	-1172.4	32.4	-190.2	-62837.0	4340738.0	5447.0
354.10	-304.1	45.3	-180.8	-87392.0	2754896.0	2155.0

354.11	-1501.9	50.2	-214.0	-97773.0	5845194.0	5560.0
354.12	-1177.9	26.1	-158.0	-50817.0	4047343.0	4975.0
354.13	-309.6	39.1	-144.4	-75413.0	2461501.0	1683.0
354.14	-1507.3	43.9	-183.3	-85850.0	5551824.0	5088.0
354.15	-903.0	47.8	-190.2	-92513.0	4300045.0	3857.0
354.16	-908.4	41.5	-156.7	-80471.0	4006675.0	3385.0
354.17	295.0	25.6	-182.6	-48950.0	555679.3	1275.0
354.18	-303.9	28.4	-172.1	-54509.0	2100946.0	2978.0
354.19	-175.7	52.0	-182.3	-100389.0	2705451.0	1436.0
354.20	-774.6	54.3	-185.5	-105204.0	4250600.0	3139.0
354.21	289.6	19.4	-146.6	-37001.0	262848.1	803.0
354.22	-309.3	22.3	-135.5	-42718.0	1808577.0	2506.0
354.23	-181.1	45.7	-151.1	-88366.0	2412082.0	964.0
354.24	-780.0	48.0	-151.9	-93160.0	3957231.0	2667.0
354.25	-902.8	31.3	-177.4	-60468.0	3646095.0	4680.0
354.26	-34.5	44.2	-179.8	-85263.0	2060253.0	1388.0
354.27	-1232.2	49.1	-200.6	-95446.0	5150576.0	4793.0
354.28	-908.2	25.1	-146.9	-48510.0	3353726.0	4208.0
354.29	-39.9	37.9	-142.3	-73181.0	1767883.0	916.0
354.30	-1237.7	42.8	-169.9	-83453.0	4858181.0	4321.0
354.31	474.8	24.7	-185.8	-47222.0	92707.5	764.0
354.32	-124.1	27.5	-172.0	-52731.0	1638534.0	2466.0
354.33	145.3	43.5	-177.4	-83703.0	1597841.0	877.0
354.34	-453.6	45.9	-177.1	-88689.0	3142990.0	2579.0
354.35	469.4	18.5	-151.8	-35440.0	-200136.6	292.0
354.36	-129.5	21.3	-135.3	-40911.0	1345165.0	1994.0
354.37	139.9	37.1	-139.2	-71550.0	1304472.0	405.0
354.38	-459.0	39.6	-141.0	-76666.0	2849621.0	2107.0
354.39	-633.4	46.6	-182.1	-90155.0	3605402.0	3090.0
354.40	-638.8	40.3	-146.1	-78104.0	3313033.0	2618.0
354.41	-82.5	27.3	-178.0	-52276.0	1528082.0	2349.0
354.42	-681.4	30.2	-175.2	-58205.0	3073231.0	4051.0
354.43	-553.2	53.5	-185.0	-103419.0	3677736.0	2510.0
354.44	-1152.1	55.8	-201.1	-108346.0	5222885.0	4212.0
354.45	-87.9	21.1	-141.6	-40421.0	1234713.0	1877.0
354.46	-686.8	24.1	-140.5	-46397.0	2780862.0	3580.0
354.47	-558.6	47.2	-151.1	-91505.0	3384367.0	2038.0
354.48	-1157.5	49.5	-170.8	-96370.0	4929516.0	3741.0
354.49	-1280.3	32.9	-196.2	-63838.0	4618380.0	5754.0
354.50	-412.0	45.7	-181.8	-88267.0	3032537.0	2462.0
354.51	-1609.7	50.6	-218.8	-98728.0	6122861.0	5867.0
354.52	-1285.7	26.5	-162.2	-51753.0	4326011.0	5282.0
354.53	-417.4	39.5	-145.4	-76276.0	2740168.0	1990.0
354.54	-1615.2	44.4	-187.8	-86786.0	5830466.0	5395.0
354.55	-1010.9	48.2	-194.7	-93453.0	4577687.0	4164.0
354.56	-1016.3	41.9	-161.8	-81405.0	4285317.0	3692.0
354.57	-154.4	27.6	-178.6	-52900.0	1712852.0	2553.0
354.58	-753.3	30.6	-176.7	-58910.0	3258001.0	4256.0
354.59	-483.9	46.0	-183.1	-88874.0	3217307.0	2666.0
354.60	-1082.8	48.5	-198.1	-94064.0	4762456.0	4369.0
354.61	-159.8	21.4	-142.2	-41055.0	1420483.0	2082.0
354.62	-758.7	24.4	-143.9	-47095.0	2965632.0	3784.0
354.63	-489.3	39.7	-146.8	-76836.0	2924938.0	2194.0
354.64	-1088.2	42.2	-165.2	-82035.0	4470087.0	3897.0
354.108	794.1	328.2	4150.6	-698452.0	-534624.9	-4152.0
354.109	452.9	339.7	4048.3	-717997.0	813556.8	-1190.0
354.110	-116.6	46.5	4342.2	-260919.0	2704436.0	-822.0
354.111	-456.9	57.4	4660.6	-279114.0	4048153.0	2139.0
354.112	117.6	59.7	-11648.1	41177.0	-404229.5	1140.0
354.113	-223.9	83.8	-11473.3	1934.0	945230.2	4103.0

354.114	-793.2	-29.5	-13625.4	160119.0	2833884.0	4476.0
354.115	-1134.1	-7.4	-12584.1	123289.0	4180449.0	7437.0
354.116	687.0	356.1	5282.4	-746142.0	-254343.1	-4142.0
354.117	345.2	364.6	5198.4	-761886.0	1096526.0	-1179.0
354.118	-9.4	12.9	3120.4	-212913.0	2423617.0	-830.0
354.119	-350.0	24.1	3425.7	-231161.0	3769258.0	2131.0
354.120	10.6	88.6	-13367.1	-9928.0	-124287.4	1150.0
354.121	-330.8	111.6	-13168.6	-47471.0	1225126.0	4112.0
354.122	-683.8	-67.9	-12251.0	218630.0	2543623.0	4462.0
354.123	-1024.6	-45.6	-11281.5	182146.0	3890213.0	7423.0
354.124	775.9	637.0	4945.1	-1289000.0	-1160271.0	-4116.0
354.125	434.8	648.8	4815.5	-1308000.0	187408.5	-1155.0
354.126	-134.7	389.6	7974.4	-901267.0	2078847.0	-788.0
354.127	-475.8	396.9	7806.4	-914149.0	3426361.0	2174.0
354.128	136.4	-69.6	-20820.1	300769.0	217177.2	1115.0
354.129	-205.2	-46.7	-20566.3	262346.0	1567972.0	4078.0
354.130	-775.3	-180.6	-26403.5	450174.0	3458423.0	4452.0
354.131	-1116.3	-158.4	-25307.9	413053.0	4805962.0	7413.0
354.132	668.1	660.2	6060.7	-1330000.0	-876603.3	-4107.0
354.133	326.5	670.6	5911.0	-1347000.0	473501.1	-1144.0
354.134	-27.6	358.5	7252.3	-855853.0	1798002.0	-797.0
354.135	-368.3	368.0	7037.1	-871309.0	3143618.0	2165.0
354.136	27.0	-45.2	-22444.4	256156.0	507910.8	1128.0
354.137	-313.8	-21.1	-22208.5	216668.0	1854436.0	4089.0
354.138	-666.4	-214.5	-24997.1	503607.0	3171035.0	4440.0
354.139	-1006.9	-191.7	-23965.9	465916.0	4516701.0	7401.0
354.140	1619.6	476.8	-4257.4	-800226.0	-4271351.0	-6189.0
354.141	1278.2	483.5	-4267.7	-809618.0	-2921912.0	-3226.0
354.142	-1424.7	-207.4	-8876.1	236494.0	6559767.0	4932.0
354.143	-1765.1	-183.9	-8356.1	195931.0	7904459.0	7893.0
354.144	1414.6	358.0	-7767.0	-511766.0	-4223328.0	-4601.0
354.145	1073.1	364.6	-7775.8	-520900.0	-2872916.0	-1639.0
354.146	-1626.4	-191.5	-14819.4	294504.0	6592627.0	6521.0
354.147	-1966.8	-167.9	-14299.5	253837.0	7937318.0	9482.0
354.148	1614.6	571.3	-4048.2	-980940.1	-4460618.0	-6179.0
354.149	1273.6	583.8	-4134.5	-1002000.0	-3113079.0	-3217.0
354.150	-1431.3	-163.3	-5429.1	150582.0	6377094.0	4941.0
354.151	-1771.4	-141.1	-4834.8	111858.0	7720862.0	7901.0
354.152	1419.4	259.0	-8448.6	-326604.0	-4033111.0	-4610.0
354.153	1077.7	267.5	-8299.4	-338310.0	-2681749.0	-1648.0
354.154	-1620.4	-232.2	-18706.5	376027.0	6778148.0	6513.0
354.155	-1960.8	-209.2	-18110.6	336955.0	8122839.0	9474.0
354.156	1263.7	560.7	-4749.9	-946951.9	-3341589.0	-6155.0
354.157	922.0	569.9	-4598.7	-959759.0	-1990227.0	-3193.0
354.158	-1061.5	-317.2	-10137.0	403471.0	5599857.0	4895.0
354.159	-1401.6	-295.5	-9573.6	365441.0	6943624.0	7855.0
354.160	1058.3	443.2	-11301.0	-661225.0	-3291668.0	-4567.0
354.161	716.5	452.4	-11149.7	-674030.0	-1940332.0	-1605.0
354.162	-1263.2	-300.6	-12193.0	462091.0	5633716.0	6484.0
354.163	-1603.3	-278.9	-11628.6	423999.0	6977484.0	9444.0
354.164	1259.2	656.4	-1949.9	-1130000.0	-3532730.0	-6145.0
354.165	917.8	671.2	-1946.5	-1154000.0	-2183292.0	-3183.0
354.166	-1067.6	-276.8	-9445.9	321362.0	5415310.0	4903.0
354.167	-1407.8	-255.3	-8887.6	283668.0	6759053.0	7864.0
354.168	1062.2	349.4	-14122.1	-484035.0	-3097679.0	-4576.0
354.169	720.5	358.7	-13970.9	-496840.0	-1746317.0	-1614.0
354.170	-1256.3	-346.3	-13879.1	550877.0	5815465.0	6475.0
354.171	-1596.7	-323.0	-13350.3	510703.0	7160157.0	9436.0
354.268	956.8	185.8	110.9	-349981.0	-2068403.0	-5760.0
354.269	-180.6	224.3	-170.8	-416193.0	2427209.0	4114.0



354.270	42.4	-64.4	-1465.0	38775.0	1186751.0	-2424.0
354.271	-1091.8	-9.4	-54.1	-56951.0	5667174.0	7445.0
354.272	753.2	70.8	-4138.7	-70314.0	-2026026.0	-4173.0
354.273	-385.3	124.6	-3537.3	-153786.0	2474307.0	5703.0
354.274	-159.3	-67.2	-7503.6	128430.0	1219610.0	-835.0
354.275	-1294.3	3.9	-4921.7	10255.0	5703830.0	9034.0
354.276	850.4	209.6	798.3	-392190.0	-1790381.0	-5750.0
354.277	-288.4	251.8	881.1	-463133.0	2710876.0	4125.0
354.278	151.7	-93.3	-2551.5	80726.0	897035.6	-2435.0
354.279	-983.9	-44.0	-1340.8	-4352.0	5383532.0	7435.0
354.280	646.1	97.9	-5850.3	-117402.0	-1745181.0	-4163.0
354.281	-492.2	155.3	-5311.5	-207273.0	2753203.0	5712.0
354.282	-50.1	-101.8	-6013.4	181697.0	930948.1	-847.0
354.283	-1185.0	-29.8	-3591.4	62183.0	5414544.0	9022.0
354.284	951.5	278.2	346.4	-526559.0	-2256747.0	-5750.0
354.285	-186.0	316.8	53.0	-592879.0	2239840.0	4124.0
354.286	37.7	30.8	721.1	-140834.0	995892.8	-2415.0
354.287	-1097.2	65.8	1447.5	-200101.0	5479805.0	7454.0
354.288	758.2	8.7	-6902.1	49589.0	-1836758.0	-4181.0
354.289	-379.7	85.8	-6259.1	-76500.0	2660727.0	5695.0
354.290	-153.7	-109.1	-11581.8	209791.0	1406029.0	-843.0
354.291	-1288.9	-40.9	-8741.2	96963.0	5891199.0	9027.0
354.292	844.5	306.4	1489.2	-574967.0	-1975877.0	-5740.0
354.293	-293.6	344.1	1143.0	-639116.0	2521558.0	4135.0
354.294	146.5	-0.3	-478.1	-95851.0	708792.1	-2426.0
354.295	-989.4	36.9	308.1	-157824.0	5196138.0	7444.0
354.296	651.2	39.3	-8599.8	-3744.0	-1556888.0	-4171.0
354.297	-486.7	116.3	-8021.2	-129264.0	2940597.0	5704.0
354.298	-44.4	-143.8	-10132.3	262843.0	1116742.0	-854.0
354.299	-1179.9	-76.1	-7358.7	151797.0	5603837.0	9015.0
357.1	2393.7	-85.2	-2906.8	120492.0	-11363080.0	-4262.0
357.2	2858.5	-103.8	-3401.5	143133.0	-16765230.0	-3503.0
357.3	2902.3	-156.0	-5258.1	210878.0	-13344120.0	-8747.0
357.4	3367.0	-174.9	-5754.4	234048.0	-18756300.0	-7988.0
357.5	1841.1	-65.1	-2236.6	92261.0	-8734189.0	-3278.0
357.6	2305.8	-83.6	-2731.4	114827.0	-14145360.0	-2519.0
357.7	2349.7	-135.9	-4588.0	182719.0	-10724230.0	-7762.0
357.8	2814.4	-154.8	-5084.9	205784.0	-16126410.0	-7004.0
357.9	3323.2	-122.3	-3897.9	165361.0	-22167400.0	-2745.0
357.10	2749.7	-134.8	-4552.5	183752.0	-12752810.0	-7401.0
357.11	3679.2	-172.1	-5545.9	229007.0	-23567140.0	-5884.0
357.12	2770.6	-102.1	-3228.4	137055.0	-19547510.0	-1760.0
357.13	2197.1	-114.6	-3882.4	155571.0	-10122930.0	-6417.0
357.14	3126.6	-151.9	-4876.0	200657.0	-20937250.0	-4900.0
357.15	3214.5	-153.5	-5048.2	206625.0	-18154960.0	-6642.0
357.16	2661.8	-133.4	-4378.7	178445.0	-15535100.0	-5658.0
357.17	2186.7	-76.7	-2684.1	109884.0	-8931562.0	-4609.0
357.18	2651.4	-95.6	-3178.3	132948.0	-14337740.0	-3850.0
357.19	2695.2	-147.6	-5034.8	200380.0	-10916630.0	-9093.0
357.20	3160.0	-166.5	-5530.4	223693.0	-16328780.0	-8334.0
357.21	1634.0	-56.6	-2014.0	81694.0	-6307699.0	-3624.0
357.22	2098.8	-75.4	-2508.2	104649.0	-11717850.0	-2866.0
357.23	2142.6	-127.4	-4365.0	172073.0	-8294744.0	-8109.0
357.24	2607.4	-146.4	-4860.6	195507.0	-13698890.0	-7350.0
357.25	3116.2	-114.0	-3673.8	155191.0	-19739890.0	-3091.0
357.26	2542.7	-126.3	-4329.2	173108.0	-10325300.0	-7748.0
357.27	3472.2	-163.8	-5321.6	218850.0	-21139620.0	-6230.0
357.28	2563.5	-93.8	-3004.2	126916.0	-17120020.0	-2107.0
357.29	1990.0	-106.2	-3659.2	145029.0	-7698435.0	-6763.0
357.30	2919.5	-143.6	-4652.0	190565.0	-18509760.0	-5246.0

357.31	2048.6	-71.1	-2535.7	102925.0	-7313578.0	-4840.0
357.32	2513.4	-90.0	-3029.7	126131.0	-12722730.0	-4081.0
357.33	2404.6	-120.7	-4180.4	166170.0	-8704313.0	-7979.0
357.34	2869.4	-139.6	-4675.5	189386.0	-14112460.0	-7220.0
357.35	1496.0	-50.9	-1865.4	74542.0	-4689689.0	-3855.0
357.36	1960.8	-69.8	-2359.5	97857.0	-10092840.0	-3097.0
357.37	1852.0	-100.6	-3510.5	138169.0	-6080426.0	-6994.0
357.38	2316.8	-119.5	-4005.7	161252.0	-11482580.0	-6236.0
357.39	3007.4	-145.2	-4824.5	196331.0	-15727470.0	-6989.0
357.40	2454.8	-125.1	-4154.7	168227.0	-13107590.0	-6005.0
357.41	2476.5	-88.6	-2996.0	124691.0	-12332080.0	-4124.0
357.42	2941.3	-107.1	-3490.8	147200.0	-17734230.0	-3365.0
357.43	2985.1	-159.5	-5347.5	215240.0	-14313130.0	-8608.0
357.44	3449.9	-178.2	-5844.2	238128.0	-19725280.0	-7849.0
357.45	1923.9	-68.4	-2325.8	96441.0	-9702195.0	-3139.0
357.46	2388.7	-87.0	-2820.7	118871.0	-15114350.0	-2381.0
357.47	2432.5	-139.3	-4677.5	186944.0	-11693240.0	-7624.0
357.48	2897.2	-158.1	-5174.5	209843.0	-17095420.0	-6865.0
357.49	3406.0	-125.6	-3987.4	169376.0	-23146410.0	-2606.0
357.50	2832.5	-138.1	-4641.8	187973.0	-13721820.0	-7263.0
357.51	3762.0	-175.4	-5635.5	233056.0	-24536150.0	-5745.0
357.52	2853.4	-105.5	-3318.0	141136.0	-20516520.0	-1622.0
357.53	2279.9	-118.0	-3971.8	159817.0	-11091930.0	-6279.0
357.54	3209.4	-155.2	-4965.7	204710.0	-21906260.0	-4761.0
357.55	3297.3	-156.8	-5137.9	210707.0	-19123970.0	-6504.0
357.56	2744.7	-136.7	-4468.4	182521.0	-16504080.0	-5520.0
357.57	2531.7	-90.8	-3055.4	127482.0	-12978090.0	-4031.0
357.58	2996.5	-109.3	-3550.4	149886.0	-18380240.0	-3272.0
357.59	2887.8	-140.4	-4701.3	190749.0	-14367800.0	-7170.0
357.60	3352.5	-159.1	-5197.7	213432.0	-19769970.0	-6412.0
357.61	1979.1	-70.7	-2385.3	99225.0	-10348200.0	-3047.0
357.62	2443.9	-89.1	-2880.4	121513.0	-15760350.0	-2288.0
357.63	2335.1	-120.3	-4031.4	162638.0	-11747940.0	-6186.0
357.64	2799.9	-138.9	-4528.2	185235.0	-17150090.0	-5427.0
357.108	307.2	313.6	-6096.3	-842470.0	-12202110.0	-7342.0
357.109	641.2	238.5	-4417.9	-730131.0	-13797420.0	-9042.0
357.110	1271.2	-317.9	-16170.0	112577.0	-15037690.0	-11722.0
357.111	1605.5	-391.3	-18067.9	227271.0	-16632930.0	-13424.0
357.112	2486.5	220.1	-12185.3	-22908.0	-2428548.0	3278.0
357.113	2820.6	146.4	-9683.0	87353.0	-4021837.0	1577.0
357.114	3452.3	-242.5	-11644.9	641883.0	-5264669.0	-1107.0
357.115	3786.6	-313.6	-13590.0	751432.0	-6857908.0	-2808.0
357.116	423.6	222.7	-2625.9	-712550.0	-12402600.0	-7983.0
357.117	757.6	140.7	-992.7	-591064.0	-13997910.0	-9683.0
357.118	1154.2	-223.8	-10629.4	-24866.0	-14847350.0	-11080.0
357.119	1488.6	-297.6	-12574.0	89537.0	-16442570.0	-12782.0
357.120	2603.0	130.3	-8034.7	104585.0	-2623010.0	2637.0
357.121	2937.1	56.7	-5520.9	214674.0	-4217299.0	936.0
357.122	3335.1	-162.1	-6566.9	527721.0	-5068386.0	-467.0
357.123	3669.3	-233.7	-8510.3	638079.0	-6661649.0	-2168.0
357.124	324.4	808.8	-3817.9	-1666000.0	-12127750.0	-7208.0
357.125	658.3	733.6	-2145.8	-1553000.0	-13723090.0	-8909.0
357.126	1288.1	201.2	-17565.8	-739781.0	-14963400.0	-11588.0
357.127	1622.3	130.5	-19327.3	-629499.0	-16558670.0	-13289.0
357.128	2470.7	-168.1	-15878.1	579070.0	-2508554.0	3140.0
357.129	2805.0	-241.5	-13380.8	688654.0	-4102792.0	1439.0
357.130	3436.6	-634.1	-9777.4	1242000.0	-5344650.0	-1244.0
357.131	3770.9	-704.9	-11724.2	1351000.0	-6937889.0	-2945.0
357.132	440.3	709.1	-406.1	-1524000.0	-12318360.0	-7847.0
357.133	774.5	629.9	-1266.1	-1404000.0	-13913630.0	-9548.0

357.134	1171.6	290.9	-12305.4	-873118.0	-14762940.0	-10947.0
357.135	1506.1	216.6	-14258.1	-758133.0	-16358130.0	-12649.0
357.136	2587.0	-246.8	-12163.0	688477.0	-2703066.0	2502.0
357.137	2921.0	-322.9	-9524.1	802778.0	-4297381.0	801.0
357.138	3319.2	-555.6	-4883.3	1130000.0	-5148417.0	-603.0
357.139	3653.6	-624.2	-6627.4	1236000.0	-6741630.0	-2305.0
357.140	-51.6	967.7	-30631.3	-1575000.0	-5478083.0	1482.0
357.141	282.4	886.1	-28121.0	-1448000.0	-7072398.0	-218.0
357.142	3164.7	-932.7	-41827.6	1253000.0	-14927590.0	-13116.0
357.143	3498.9	-999.7	-43762.9	1354000.0	-16522850.0	-14818.0
357.144	602.2	914.9	-33105.0	-1280000.0	-2545312.0	4671.0
357.145	936.2	833.2	-30594.5	-1154000.0	-4139627.0	2970.0
357.146	3818.7	-888.6	-40491.9	1367000.0	-12001770.0	-9933.0
357.147	4153.0	-955.7	-42426.5	1468000.0	-13587010.0	-11635.0
357.148	-46.6	1119.8	-29564.2	-1828000.0	-5453815.0	1522.0
357.149	287.4	1045.1	-27054.7	-1716000.0	-7048130.0	-179.0
357.150	3169.7	-816.3	-42350.0	1075000.0	-14906320.0	-13074.0
357.151	3504.0	-883.1	-44288.1	1176000.0	-16501560.0	-14776.0
357.152	597.4	766.1	-34218.8	-1033000.0	-2569529.0	4631.0
357.153	931.4	684.2	-31712.2	-905733.0	-4163843.0	2931.0
357.154	3813.7	-1006.3	-39962.2	1547000.0	-12023040.0	-9974.0
357.155	4148.0	-1074.7	-41896.9	1651000.0	-13618280.0	-11676.0
357.156	336.6	663.3	-16760.9	-1137000.0	-6127655.0	-656.0
357.157	670.6	581.3	-14256.1	-1010000.0	-7721970.0	-2356.0
357.158	2775.4	-662.8	-24785.5	869973.1	-14276300.0	-10983.0
357.159	3109.6	-729.4	-26719.4	970457.0	-15871560.0	-12686.0
357.160	990.6	610.0	-19248.4	-842609.0	-3194834.0	2533.0
357.161	1324.6	528.0	-16743.7	-715493.0	-4789148.0	833.0
357.162	3429.3	-619.6	-23451.2	986517.0	-11340500.0	-7800.0
357.163	3763.5	-686.3	-25390.3	1087000.0	-12935770.0	-9502.0
357.164	341.5	818.5	-15678.3	-1397000.0	-6103413.0	-617.0
357.165	675.5	743.1	-13174.9	-1283000.0	-7697728.0	-2317.0
357.166	2780.5	-545.4	-25313.3	690322.0	-14255010.0	-10942.0
357.167	3114.7	-611.4	-27219.7	789898.0	-15850270.0	-12644.0
357.168	985.9	460.2	-20382.2	-593307.0	-3220025.0	2494.0
357.169	1319.9	378.3	-17877.5	-466191.0	-4814340.0	794.0
357.170	3424.1	-736.0	-22933.5	1164000.0	-11371820.0	-7842.0
357.171	3758.4	-803.2	-24869.3	1266000.0	-12957060.0	-9544.0
357.268	680.0	358.7	-9830.4	-658857.0	-6924586.0	-1641.0
357.269	1793.2	102.0	-2811.6	-274514.0	-12235330.0	-7310.0
357.270	1644.5	-251.6	-12365.6	256372.0	-9763037.0	-6019.0
357.271	2758.6	-483.9	-18799.8	612533.0	-15070560.0	-11693.0
357.272	1333.6	312.5	-12255.1	-379204.0	-3990866.0	1546.0
357.273	2447.3	52.4	-3935.9	18247.0	-9304487.0	-4123.0
357.274	2298.5	-214.6	-11028.4	385451.0	-6827216.0	-2835.0
357.275	3412.9	-452.0	-17494.7	751615.0	-12134660.0	-8509.0
357.276	796.4	268.3	-5664.0	-529696.0	-7120073.0	-2283.0
357.277	1909.7	6.0	-471.4	-136981.0	-12435800.0	-7951.0
357.278	1527.7	-166.8	-7248.0	133839.0	-9564652.0	-5379.0
357.279	2641.9	-399.1	-13577.1	490125.0	-14880150.0	-11052.0
357.280	1450.2	220.7	-8103.9	-247410.0	-4186302.0	905.0
357.281	2563.8	-34.2	-164.4	140698.0	-9499948.0	-4764.0
357.282	2181.6	-134.3	-5923.0	271997.0	-6630856.0	-2196.0
357.283	3295.9	-371.3	-12462.7	636063.0	-11944320.0	-7869.0
357.284	685.1	508.5	-8781.7	-907601.0	-6901293.0	-1601.0
357.285	1798.3	250.9	-2128.4	-522060.0	-12214040.0	-7270.0
357.286	1649.4	-100.4	-12874.4	9063.0	-9731795.0	-5979.0
357.287	2763.7	-345.9	-19278.8	391985.0	-15049260.0	-11652.0
357.288	1328.9	182.1	-13368.2	-169971.0	-4015058.0	1505.0
357.289	2442.6	-64.0	-5034.8	198551.0	-9328679.0	-4164.0

357.290	2293.7	-329.1	-10461.0	559462.0	-6850432.0	-2877.0
357.291	3408.2	-569.7	-16933.5	932315.1	-12165850.0	-8550.0
357.292	801.5	417.4	-4633.6	-776942.0	-7095780.0	-2243.0
357.293	1914.9	157.4	-1038.9	-387197.0	-12404480.0	-7911.0
357.294	1532.5	-14.2	-7675.7	-115713.0	-9540434.0	-5339.0
357.295	2647.1	-257.6	-14079.7	261511.0	-14848830.0	-11011.0
357.296	1445.4	92.5	-9215.9	-42395.0	-4210519.0	864.0
357.297	2559.0	-152.0	-986.0	323112.0	-9521166.0	-4805.0
357.298	2176.8	-248.0	-5360.3	444452.0	-6654073.0	-2237.0
357.299	3290.9	-487.9	-11775.0	816317.0	-11965590.0	-7909.0
372.1	-4067.2	134.3	35.1	71511.0	-3206239.0	-9679.0
372.2	-6209.6	176.8	47.8	106380.0	-4758444.0	-20845.0
372.3	-4988.0	274.6	73.2	159812.0	-3613708.0	-7336.0
372.4	-7130.3	318.6	86.2	196342.0	-5165888.0	-18502.0
372.5	-3127.3	102.9	26.9	54439.0	-2464927.0	-7442.0
372.6	-5269.6	145.2	39.6	89023.0	-4017107.0	-18609.0
372.7	-4048.0	243.4	65.0	142909.0	-2873370.0	-5100.0
372.8	-6190.4	287.0	77.9	178961.0	-4425576.0	-16266.0
372.9	-8351.9	217.9	60.2	139669.0	-6310624.0	-32011.0
372.10	-4711.7	232.5	61.8	133331.0	-3491652.0	-8039.0
372.11	-8996.4	317.1	87.0	202522.0	-6596038.0	-30371.0
372.12	-7412.0	186.2	51.9	122214.0	-5569313.0	-29775.0
372.13	-3771.8	201.3	53.6	116393.0	-2751340.0	-5803.0
372.14	-8056.5	285.4	78.7	185072.0	-5855726.0	-28135.0
372.15	-6854.1	275.8	74.6	169103.0	-5043857.0	-19205.0
372.16	-5914.2	244.4	66.4	151912.0	-4303546.0	-16969.0
372.17	-3100.8	114.9	29.4	55474.0	-2518208.0	-4634.0
372.18	-5243.2	158.8	42.4	91874.0	-4070413.0	-15800.0
372.19	-4021.6	255.5	67.6	144094.0	-2925677.0	-2292.0
372.20	-6163.9	300.0	80.7	181258.0	-4477857.0	-13458.0
372.21	-2160.9	83.6	21.3	38529.0	-1776896.0	-2398.0
372.22	-4303.2	127.2	34.2	74539.0	-3329077.0	-13564.0
372.23	-3081.6	223.9	59.4	126822.0	-2185340.0	-56.0
372.24	-5224.0	268.8	72.5	164292.0	-3737545.0	-11222.0
372.25	-7385.5	200.1	54.8	125343.0	-5622594.0	-26966.0
372.26	-3745.3	213.0	56.1	117217.0	-2803621.0	-2994.0
372.27	-8030.0	299.3	81.6	188250.0	-5908007.0	-25327.0
372.28	-6445.6	168.5	46.6	107973.0	-4881282.0	-24730.0
372.29	-2805.4	182.0	48.0	100496.0	-2063309.0	-758.0
372.30	-7090.1	267.6	73.4	170857.0	-5167695.0	-23090.0
372.31	-2456.6	102.2	25.7	45118.0	-2058871.0	-1271.0
372.32	-4598.9	146.6	38.8	82063.0	-3611051.0	-12437.0
372.33	-3101.1	200.4	52.4	106832.0	-2345284.0	369.0
372.34	-5243.4	244.8	65.4	143869.0	-3897464.0	-10797.0
372.35	-1516.6	70.6	17.5	27747.0	-1318612.0	965.0
372.36	-3659.0	115.1	30.5	64839.0	-2870740.0	-10201.0
372.37	-2161.1	169.5	44.3	90293.0	-1603947.0	2605.0
372.38	-4303.5	213.7	57.3	126984.0	-3156152.0	-8561.0
372.39	-5887.7	257.4	69.1	154188.0	-4355827.0	-14160.0
372.40	-4947.8	226.3	61.0	137404.0	-3615515.0	-11924.0
372.41	-4453.8	141.9	37.4	77802.0	-3481261.0	-11697.0
372.42	-6596.1	184.0	50.0	112162.0	-5033441.0	-22863.0
372.43	-5374.5	282.6	75.5	166481.0	-3889705.0	-9354.0
372.44	-7516.9	325.8	88.3	202082.0	-5441910.0	-20520.0
372.45	-3513.9	110.5	29.2	60682.0	-2740950.0	-9460.0
372.46	-5656.2	152.4	41.7	94755.0	-4293130.0	-20626.0
372.47	-4434.6	251.1	67.3	149259.0	-3148393.0	-7118.0
372.48	-6576.9	294.1	80.1	184694.0	-4700573.0	-18284.0
372.49	-8738.5	225.0	62.3	145337.0	-6585647.0	-34029.0
372.50	-5098.3	240.2	64.0	139678.0	-3766674.0	-10057.0

372.51	-9383.0	324.2	89.1	208235.0	-6871060.0	-32389.0
372.52	-7798.5	193.4	54.1	127987.0	-5845310.0	-31793.0
372.53	-4158.4	209.0	55.9	122745.0	-3026362.0	-7821.0
372.54	-8443.1	292.5	80.9	190784.0	-6130748.0	-30153.0
372.55	-7240.7	283.0	76.8	174866.0	-5318880.0	-21223.0
372.56	-6300.7	251.6	68.5	157660.0	-4578543.0	-18987.0
372.57	-4711.5	147.0	38.9	81968.0	-3664601.0	-13042.0
372.58	-6853.8	188.8	51.4	115963.0	-5216781.0	-24208.0
372.59	-5356.0	245.2	65.5	143809.0	-3950014.0	-11402.0
372.60	-7498.4	287.8	78.2	178697.0	-5502220.0	-22568.0
372.61	-3771.6	115.6	30.7	64821.0	-2924289.0	-10806.0
372.62	-5913.9	157.0	43.1	98445.0	-4476470.0	-21972.0
372.63	-4416.1	214.1	57.4	126982.0	-3209702.0	-9166.0
372.64	-6558.4	256.3	70.0	161491.0	-4761883.0	-20332.0
372.108	-1112.3	-2643.5	-274.1	-2867000.0	-2628024.0	-3996.0
372.109	-1760.7	-2427.6	720.7	-2645000.0	-3165426.0	-6216.0
372.110	-1954.4	-1360.2	-2743.3	-1582000.0	-3702538.0	-1945.0
372.111	-2602.9	-1150.2	-1741.4	-1363000.0	-4239965.0	-4165.0
372.112	-4391.9	861.2	1542.3	832736.1	-1018802.0	-8859.0
372.113	-5040.2	1059.3	2588.1	1033000.0	-1557113.0	-11079.0
372.114	-5233.0	1711.9	-828.8	1648000.0	-2093855.0	-6812.0
372.115	-5881.5	1871.4	156.4	1796000.0	-2632254.0	-9032.0
372.116	-1049.4	-3036.1	1795.3	-3242000.0	-2504076.0	-4158.0
372.117	-1697.8	-2821.3	2789.2	-3022000.0	-3042477.0	-6378.0
372.118	-2018.1	-953.5	-4799.2	-1194000.0	-3826689.0	-1786.0
372.119	-2666.6	-743.2	-3797.3	-973755.0	-4365117.0	-4006.0
372.120	-4329.0	459.8	3611.7	446784.0	-894951.0	-9021.0
372.121	-4977.3	641.0	4595.4	622748.0	-1433153.0	-11241.0
372.122	-5296.5	2180.3	-2872.3	2106000.0	-2217730.0	-6650.0
372.123	-5944.9	2331.2	-1886.5	2246000.0	-2755329.0	-8870.0
372.124	-1151.3	-4900.0	-2564.7	-5209000.0	-2629912.0	-4364.0
372.125	-1799.6	-4689.1	-1570.8	-4992000.0	-3168289.0	-6584.0
372.126	-1993.0	-3583.0	-4953.4	-3874000.0	-3704325.0	-2311.0
372.127	-2641.6	-3372.7	-3952.0	-3654000.0	-4241778.0	-4532.0
372.128	-4353.9	2236.4	3690.6	2165000.0	-1018359.0	-8503.0
372.129	-5002.4	2400.1	4678.4	2316000.0	-1556557.0	-10723.0
372.130	-5195.9	3043.0	1169.9	2913000.0	-2093540.0	-6457.0
372.131	-5844.3	3200.6	2154.5	3058000.0	-2631822.0	-8676.0
372.132	-1088.4	-5282.7	-498.0	-5574000.0	-2505964.0	-4525.0
372.133	-1736.9	-5069.0	495.8	-5355000.0	-3043391.0	-6745.0
372.134	-2056.7	-3174.5	-7008.6	-3484000.0	-3828476.0	-2152.0
372.135	-2705.2	-2962.4	-6006.4	-3262000.0	-4366904.0	-4373.0
372.136	-4291.4	1802.6	5662.6	1737000.0	-894545.5	-8664.0
372.137	-4939.6	1975.5	6650.8	1899000.0	-1432649.0	-10884.0
372.138	-5258.9	3449.3	-876.9	3305000.0	-2217408.0	-6295.0
372.139	-5907.3	3610.2	109.1	3454000.0	-2755796.0	-8515.0
372.140	-1279.3	-2732.5	3317.9	-2861000.0	-810719.5	-8092.0
372.141	-1927.7	-2486.9	4318.9	-2608000.0	-1348926.0	-10312.0
372.142	-4085.4	1018.5	-4952.1	829659.0	-4393853.0	-1262.0
372.143	-4733.8	1159.1	-3967.8	961993.0	-4932255.0	-3482.0
372.144	-2263.3	-1549.8	3927.7	-1602000.0	-327907.7	-9549.0
372.145	-2911.6	-1303.4	4928.9	-1349000.0	-866088.2	-11769.0
372.146	-5069.1	1792.4	-4410.9	1631000.0	-3911270.0	-2723.0
372.147	-5717.5	1932.2	-3426.6	1763000.0	-4449673.0	-4943.0
372.148	-1291.0	-3412.5	2629.3	-3566000.0	-811247.1	-8203.0
372.149	-1939.4	-3197.5	3623.8	-3346000.0	-1349472.0	-10423.0
372.150	-4096.6	620.5	-5554.3	447476.0	-4394693.0	-1368.0
372.151	-4745.0	759.7	-4570.5	578461.0	-4932095.0	-3588.0
372.152	-2251.8	-893.9	4608.6	-926619.1	-327482.9	-9439.0
372.153	-2900.1	-647.0	5610.2	-672914.0	-865642.4	-11659.0



372.154	-5057.8	2196.7	-3806.8	2020000.0	-3911405.0	-2616.0
372.155	-5706.2	2338.6	-2821.7	2153000.0	-4449807.0	-4836.0
372.156	-1069.6	-4024.0	10218.6	-4092000.0	-397958.1	-8633.0
372.157	-1717.9	-3776.6	11220.3	-3838000.0	-936108.5	-10853.0
372.158	-4296.6	2486.8	-11773.0	2251000.0	-4808403.0	-728.0
372.159	-4945.0	2625.4	-10789.4	2382000.0	-5345805.0	-2949.0
372.160	-2053.5	-2832.6	10830.4	-2825000.0	84908.1	-10090.0
372.161	-2701.8	-2585.2	11832.1	-2571000.0	-453242.4	-12309.0
372.162	-5280.2	3258.8	-11231.8	3051000.0	-4325795.0	-2189.0
372.163	-5928.7	3397.5	-10248.1	3182000.0	-4863222.0	-4410.0
372.164	-1081.3	-4721.8	9526.3	-4816000.0	-398516.6	-8744.0
372.165	-1729.6	-4503.9	10521.7	-4593000.0	-936683.1	-10964.0
372.166	-4307.9	2086.8	-12376.2	1867000.0	-4808268.0	-835.0
372.167	-4956.4	2225.0	-11392.8	1997000.0	-5346696.0	-3056.0
372.168	-2041.9	-2168.1	11513.7	-2141000.0	85429.2	-9979.0
372.169	-2690.2	-1920.8	12515.4	-1887000.0	-452720.2	-12198.0
372.170	-5269.1	3653.9	-10630.3	3431000.0	-4324980.0	-2083.0
372.171	-5917.5	3795.1	-9645.9	3564000.0	-4863382.0	-4303.0
372.268	-1503.4	-1465.5	-705.3	-1591000.0	-1436187.0	-3105.0
372.269	-3664.9	-752.6	2614.3	-861336.1	-3230235.0	-10506.0
372.270	-2345.2	-148.4	-3154.7	-263385.0	-2510626.0	-1054.0
372.271	-4506.7	404.8	143.4	275814.0	-4304674.0	-8455.0
372.272	-2487.4	-303.4	-99.0	-350303.0	-953452.3	-4563.0
372.273	-4648.5	435.2	3223.7	398887.0	-2747627.0	-11963.0
372.274	-3328.9	689.6	-2599.2	613511.0	-2029043.0	-2515.0
372.275	-5490.2	1209.3	691.7	1107000.0	-3822040.0	-9916.0
372.276	-1440.6	-1859.5	1363.3	-1967000.0	-1312435.0	-3268.0
372.277	-3601.8	-1144.7	4675.5	-1237000.0	-3106236.0	-10668.0
372.278	-2408.6	266.0	-5207.0	133547.0	-2635701.0	-895.0
372.279	-4570.1	835.1	-1904.2	693305.0	-4428749.0	-8295.0
372.280	-2424.5	-685.6	1972.9	-714533.0	-829597.0	-4725.0
372.281	-4585.5	26.8	5244.5	1860.0	-2623654.0	-12125.0
372.282	-3392.3	1130.7	-4645.5	1041000.0	-2153118.0	-2355.0
372.283	-5553.5	1642.0	-1354.8	1526000.0	-3946090.0	-9755.0
372.284	-1515.1	-2138.0	-1392.8	-2289000.0	-1437154.0	-3215.0
372.285	-3676.5	-1423.2	1934.0	-1557000.0	-3231177.0	-10616.0
372.286	-2356.6	-804.3	-3815.7	-941501.0	-2511516.0	-1164.0
372.287	-4518.0	-152.0	-491.5	-282734.0	-4305539.0	-8564.0
372.288	-2476.0	211.1	549.5	163401.0	-953138.8	-4454.0
372.289	-4637.2	833.1	3825.1	777810.0	-2747762.0	-11856.0
372.290	-3317.7	1067.8	-2001.2	972209.0	-2028203.0	-2409.0
372.291	-5479.1	1610.3	1291.7	1488000.0	-3822226.0	-9809.0
372.292	-1452.1	-2530.9	676.6	-2665000.0	-1312856.0	-3377.0
372.293	-3613.5	-1819.5	3989.5	-1937000.0	-3107203.0	-10778.0
372.294	-2420.1	-395.5	-5870.6	-553566.0	-2635617.0	-1004.0
372.295	-4581.6	267.2	-2543.7	122578.0	-4429665.0	-8404.0
372.296	-2413.0	-186.5	2618.6	-218125.0	-829270.1	-4617.0
372.297	-4574.1	428.9	5860.1	386205.0	-2623763.0	-12017.0
372.298	-3381.1	1513.8	-4047.6	1405000.0	-2152278.0	-2249.0
372.299	-5542.3	2038.7	-754.1	1903000.0	-3946250.0	-9648.0
374.1	-31626.4	4493.8	746.3	1399000.0	-22848870.0	12293.0
374.2	-59643.4	4886.1	881.7	1534000.0	-40742580.0	-9585.0
374.3	-31542.9	9148.4	1335.5	2834000.0	-23547700.0	56162.0
374.4	-59559.9	9544.6	1478.1	2972000.0	-41451410.0	34295.0
374.5	-24327.4	3452.1	574.3	1074000.0	-17578210.0	9397.0
374.6	-52344.4	3843.7	707.0	1209000.0	-35471920.0	-12482.0
374.7	-24243.9	8107.1	1163.2	2510000.0	-18277040.0	53267.0
374.8	-52260.9	8502.3	1300.8	2647000.0	-36170750.0	31397.0
374.9	-87660.5	5275.1	1000.1	1667000.0	-58636320.0	-31473.0
374.10	-31567.9	7752.0	1158.7	2404000.0	-23344040.0	43002.0

374.11	-87602.1	8535.9	1415.0	2673000.0	-59131510.0	-759.0
374.12	-80361.5	4232.6	820.2	1342000.0	-53365660.0	-34372.0
374.13	-24268.9	6710.6	986.4	2080000.0	-18063380.0	40107.0
374.14	-80303.1	7493.3	1235.4	2349000.0	-53850850.0	-3658.0
374.15	-59584.9	8146.4	1301.7	2540000.0	-41237750.0	21129.0
374.16	-52286.0	7104.5	1123.7	2215000.0	-35957120.0	18232.0
374.17	-19038.9	4319.9	676.2	1338000.0	-14816310.0	22190.0
374.18	-47055.8	4715.4	824.2	1475000.0	-32711000.0	323.0
374.19	-18955.3	8975.1	1267.0	2774000.0	-15516120.0	66063.0
374.20	-46972.3	9372.5	1417.0	2912000.0	-33409830.0	44199.0
374.21	-11739.9	3278.4	503.5	1014000.0	-9540652.0	19295.0
374.22	-39756.9	3673.0	649.9	1150000.0	-27430360.0	-2574.0
374.23	-11656.4	7933.0	1093.6	2450000.0	-10244480.0	63165.0
374.24	-39673.3	8331.0	1244.1	2588000.0	-28139170.0	41304.0
374.25	-75072.9	5104.6	947.7	1608000.0	-50604740.0	-21564.0
374.26	-18980.4	7577.8	1090.7	2343000.0	-15312480.0	52900.0
374.27	-75014.4	8365.6	1363.0	2615000.0	-51099900.0	9151.0
374.28	-67773.9	4062.3	770.7	1284000.0	-45334070.0	-24462.0
374.29	-11681.4	6536.9	918.7	2019000.0	-10033820.0	50006.0
374.30	-67715.5	7323.2	1184.9	2290000.0	-45819260.0	6253.0
374.31	-10647.2	4204.7	628.5	1299000.0	-9460598.0	28791.0
374.32	-38664.1	4601.3	784.3	1436000.0	-27353280.0	6928.0
374.33	-10588.7	7462.6	1045.7	2303000.0	-9952765.0	59501.0
374.34	-38605.6	7859.5	1195.9	2441000.0	-27848450.0	37637.0
374.35	-3348.2	3162.2	455.4	973965.1	-4185936.0	25893.0
374.36	-31365.2	3559.2	611.1	1111000.0	-22082650.0	4031.0
374.37	-3289.7	6422.1	873.9	1980000.0	-4678104.0	56609.0
374.38	-31306.7	6818.2	1024.1	2117000.0	-22567810.0	34742.0
374.39	-46997.4	7974.7	1240.7	2481000.0	-33206190.0	31035.0
374.40	-39698.4	6933.7	1068.7	2157000.0	-27925530.0	28141.0
374.41	-36661.4	4563.2	774.0	1423000.0	-26065500.0	8333.0
374.42	-64678.4	4954.3	904.2	1557000.0	-43959210.0	-13548.0
374.43	-36577.9	9218.7	1362.7	2859000.0	-26764330.0	52205.0
374.44	-64594.9	9612.8	1499.3	2995000.0	-44658040.0	30331.0
374.45	-29362.5	3521.3	602.0	1098000.0	-20784860.0	5436.0
374.46	-57379.5	3911.8	729.3	1232000.0	-38678570.0	-16446.0
374.47	-29278.9	8176.6	1190.0	2534000.0	-21493660.0	49307.0
374.48	-57296.0	8570.5	1322.0	2670000.0	-39387400.0	27433.0
374.49	-92695.5	5343.1	1020.4	1690000.0	-61852940.0	-35438.0
374.50	-36602.9	7821.5	1185.9	2428000.0	-26550670.0	39042.0
374.51	-92637.1	8604.0	1434.9	2697000.0	-62348140.0	-4723.0
374.52	-85396.6	4300.9	840.0	1366000.0	-56572310.0	-38335.0
374.53	-29304.0	6780.1	1014.2	2104000.0	-21280030.0	36147.0
374.54	-85338.1	7561.4	1254.9	2372000.0	-57067480.0	-7622.0
374.55	-64620.0	8214.6	1323.0	2563000.0	-44444400.0	17165.0
374.56	-57321.0	7172.7	1144.7	2239000.0	-39173740.0	14269.0
374.57	-40018.1	4609.3	792.3	1439000.0	-28206590.0	5692.0
374.58	-68035.1	4999.7	919.3	1573000.0	-46100300.0	-16191.0
374.59	-39959.6	7867.6	1203.9	2444000.0	-28701760.0	36401.0
374.60	-67976.7	8260.1	1337.2	2579000.0	-46595490.0	14523.0
374.61	-32719.1	3567.4	620.1	1114000.0	-22925930.0	2796.0
374.62	-60736.2	3956.9	744.5	1248000.0	-40819660.0	-19090.0
374.63	-32660.6	6826.5	1032.3	2120000.0	-23421100.0	33507.0
374.64	-60677.7	7218.2	1158.7	2255000.0	-41314830.0	11626.0
374.108	-26474.2	-6895.4	6749.9	-2970000.0	-18992530.0	-85256.0
374.109	-30940.3	-3680.9	10019.4	-2013000.0	-23114910.0	-68467.0
374.110	-29623.8	-4871.8	-3510.6	-2006000.0	-21941110.0	-55793.0
374.111	-34089.3	-1661.2	-167.8	-1048000.0	-26063340.0	-38967.0
374.112	-14512.4	11003.3	-3820.8	3652000.0	-9669619.0	88426.0
374.113	-18980.4	14131.8	-1111.5	4550000.0	-13797480.0	105092.0

374.114	-17677.5	11643.7	-19288.1	3835000.0	-12648130.0	114689.0
374.115	-22142.1	14755.3	-16241.3	4721000.0	-16774130.0	131317.0
374.116	-26282.4	-6859.2	8049.4	-2863000.0	-18883900.0	-86168.0
374.117	-30748.2	-3644.4	11301.7	-1905000.0	-23006210.0	-69398.0
374.118	-29820.2	-4923.6	-4693.2	-2137000.0	-22050910.0	-54355.0
374.119	-34285.8	-1711.6	-1356.4	-1178000.0	-26183160.0	-37550.0
374.120	-14320.7	11027.7	-2689.0	3752000.0	-9566013.0	87442.0
374.121	-18786.8	14160.3	66.4	4654000.0	-13691390.0	104076.0
374.122	-17867.8	11634.8	-20292.8	3721000.0	-12749380.0	116317.0
374.123	-22332.2	14751.5	-17261.2	4613000.0	-16872330.0	132922.0
374.124	-26133.4	-11421.2	9428.1	-5371000.0	-18636120.0	-103475.0
374.125	-30598.6	-8205.5	12695.6	-4412000.0	-22758280.0	-86720.0
374.126	-29278.9	-9496.8	-742.8	-4458000.0	-21583660.0	-74234.0
374.127	-33744.4	-6282.0	2575.0	-3497000.0	-25705890.0	-57437.0
374.128	-14881.7	13369.6	-15888.7	4848000.0	-10070260.0	100428.0
374.129	-19346.6	16491.5	-12885.2	5738000.0	-14193330.0	117120.0
374.130	-18043.6	14057.2	-31136.1	5054000.0	-13044960.0	126700.0
374.131	-22508.1	17167.5	-28103.1	5939000.0	-17166930.0	143325.0
374.132	-25936.1	-11401.9	10651.5	-5274000.0	-18516100.0	-104553.0
374.133	-30402.1	-8194.0	13921.0	-4319000.0	-22648450.0	-87836.0
374.134	-29475.3	-9543.8	-1940.3	-4586000.0	-21693460.0	-72824.0
374.135	-33940.9	-6326.0	1378.0	-3623000.0	-25815720.0	-56014.0
374.136	-14686.2	13381.3	-14769.5	4949000.0	-9962686.0	99224.0
374.137	-19151.6	16510.4	-11788.6	5844000.0	-14085890.0	115888.0
374.138	-18235.5	14072.8	-32146.0	4962000.0	-13148610.0	128273.0
374.139	-22700.3	17187.3	-29097.1	5850000.0	-17275660.0	144920.0
374.140	-18606.8	-2417.6	16995.9	-1432000.0	-12270750.0	-57796.0
374.141	-23072.3	873.9	20280.7	-437887.0	-16389980.0	-40757.0
374.142	-29129.1	2494.4	-22829.3	730634.0	-22155680.0	36095.0
374.143	-33594.0	5563.5	-19690.1	1602000.0	-26277760.0	52540.0
374.144	-15012.3	3305.0	15410.7	750899.0	-9466369.0	-4820.0
374.145	-19477.8	6598.3	18695.7	1746000.0	-13589600.0	12225.0
374.146	-25546.6	7040.8	-29372.5	2255000.0	-19377340.0	86100.0
374.147	-30011.6	10110.6	-26231.4	3127000.0	-23499440.0	102547.0
374.148	-18503.4	-3799.5	17781.1	-2164000.0	-12161540.0	-63346.0
374.149	-22969.6	-587.0	21060.8	-1210000.0	-16283940.0	-46549.0
374.150	-29019.0	1776.4	-19268.9	363419.0	-22037770.0	32531.0
374.151	-33484.3	4842.2	-16146.4	1234000.0	-26159940.0	48956.0
374.152	-15116.7	4644.1	14546.5	1462000.0	-9576839.0	509.0
374.153	-19581.6	7938.1	17847.7	2456000.0	-13698910.0	17574.0
374.154	-25655.4	7775.5	-32905.8	2628000.0	-19494930.0	89742.0
374.155	-30120.7	10860.6	-29786.1	3509000.0	-23617100.0	106240.0
374.156	-17969.9	-2250.7	21262.4	-1047000.0	-11928270.0	-60778.0
374.157	-22434.6	1044.1	24570.1	-52710.0	-16048290.0	-43705.0
374.158	-29781.3	2582.5	-25876.5	425366.0	-22521050.0	41994.0
374.159	-34246.8	5647.2	-22761.5	1296000.0	-26643280.0	58410.0
374.160	-14374.7	3493.2	19673.5	1147000.0	-9123705.0	-7760.0
374.161	-18839.3	6788.0	22981.2	2141000.0	-13245710.0	9313.0
374.162	-26198.5	7119.6	-32304.3	1944000.0	-19732630.0	92028.0
374.163	-30664.0	10184.5	-29189.2	2814000.0	-23854860.0	108445.0
374.164	-17867.4	-3679.1	22052.3	-1802000.0	-11821280.0	-66446.0
374.165	-22332.8	-460.3	25355.0	-845920.0	-15942480.0	-49606.0
374.166	-29672.3	1863.9	-22441.8	60799.0	-22403410.0	38361.0
374.167	-34137.8	4927.9	-19326.8	931263.9	-26525640.0	54771.0
374.168	-14477.2	4851.9	18842.8	1865000.0	-9230694.0	-2352.0
374.169	-18941.9	8146.7	22150.6	2859000.0	-13353720.0	14722.0
374.170	-26309.3	7829.2	-35839.2	2307000.0	-19860720.0	95576.0
374.171	-30774.2	10899.8	-32705.2	3180000.0	-23982800.0	112026.0
374.268	-17072.1	-3893.3	1193.0	-1494000.0	-10905630.0	-42613.0
374.269	-31958.1	6813.5	12121.2	1690000.0	-24652980.0	13321.0

374.270	-20225.1	-1971.4	-9638.7	-593699.0	-13867070.0	-13265.0
374.271	-35108.6	8444.3	1567.7	2420000.0	-27611780.0	42033.0
374.272	-13479.9	1763.4	-399.2	661048.0	-8104829.0	10163.0
374.273	-28368.4	12487.3	9537.5	3826000.0	-21852810.0	66492.0
374.274	-16642.5	2738.3	-15305.1	1027000.0	-11080710.0	37150.0
374.275	-31527.5	13111.7	-5047.2	4000000.0	-24823800.0	92516.0
374.276	-16881.8	-3859.7	2460.1	-1385000.0	-10804380.0	-43565.0
374.277	-31766.9	6845.8	13411.9	1794000.0	-24554500.0	12389.0
374.278	-20421.7	-2007.8	-10859.5	-719168.0	-13977920.0	-11695.0
374.279	-35304.6	8466.6	543.9	2331000.0	-27721480.0	43682.0
374.280	-13288.0	1825.8	888.9	782124.0	-8001173.0	9303.0
374.281	-28175.1	12516.3	10686.8	3931000.0	-21753800.0	65462.0
374.282	-16838.4	2761.1	-16199.8	933067.0	-11190380.0	38925.0
374.283	-31720.8	13112.0	-5985.7	3896000.0	-24932810.0	94136.0
374.284	-16968.2	-5254.1	1972.8	-2217000.0	-10797290.0	-48107.0
374.285	-31854.9	5449.7	12900.1	965308.0	-24546810.0	7816.0
374.286	-20120.8	-3315.2	-8768.7	-1308000.0	-13756630.0	-18647.0
374.287	-35003.5	7364.8	3363.0	1859000.0	-27495140.0	37377.0
374.288	-13586.5	2749.7	-2847.7	1174000.0	-8218857.0	14513.0
374.289	-28476.9	13201.6	5999.8	4187000.0	-21970320.0	70111.0
374.290	-16752.5	3439.8	-18785.3	1385000.0	-11199600.0	40641.0
374.291	-31637.4	13839.7	-8585.0	4367000.0	-24941660.0	96133.0
374.292	-16776.6	-5218.1	3280.8	-2110000.0	-10693710.0	-49009.0
374.293	-31663.4	5479.8	14188.2	1070000.0	-24438250.0	6847.0
374.294	-20316.7	-3353.4	-9822.9	-1436000.0	-13866300.0	-17094.0
374.295	-35199.3	7310.8	1959.7	1727000.0	-27604780.0	38812.0
374.296	-13395.0	2773.8	-1722.0	1274000.0	-8116303.0	13545.0
374.297	-28284.5	13226.8	7141.2	4290000.0	-21871530.0	69045.0
374.298	-16947.4	3449.7	-19682.1	1284000.0	-11308010.0	42374.0
374.299	-31829.6	13851.5	-9566.0	4271000.0	-25050400.0	97753.0
488.1	-31728.7	-4578.0	651.4	-1415000.0	-22944810.0	-10309.0
488.2	-59801.6	-5070.6	791.1	-1574000.0	-40872700.0	12884.0
488.3	-31655.4	-9226.7	1153.3	-2848000.0	-23696230.0	-53935.0
488.4	-59728.3	-9716.5	1287.0	-3007000.0	-41614110.0	-30735.0
488.5	-24406.0	-3517.4	501.8	-1087000.0	-17648140.0	-7877.0
488.6	-52478.9	-4010.5	641.3	-1247000.0	-35566020.0	15314.0
488.7	-24332.7	-8165.6	1003.2	-2520000.0	-18399560.0	-51502.0
488.8	-52405.6	-8656.3	1135.9	-2679000.0	-36317440.0	-28305.0
488.9	-87874.4	-5566.8	923.9	-1736000.0	-58790560.0	36065.0
488.10	-31677.4	-7832.1	1002.0	-2418000.0	-23471800.0	-40846.0
488.11	-87823.1	-8819.3	1268.5	-2738000.0	-59317540.0	5530.0
488.12	-80551.8	-4507.0	769.3	-1408000.0	-53493910.0	38494.0
488.13	-24354.7	-6771.2	852.4	-2090000.0	-18175130.0	-38414.0
488.14	-80500.4	-7759.6	1116.8	-2411000.0	-54020880.0	7959.0
488.15	-59750.3	-8323.6	1137.3	-2577000.0	-41389690.0	-17651.0
488.16	-52427.6	-7262.9	987.2	-2249000.0	-36093020.0	-15220.0
488.17	-19116.0	-4363.8	585.5	-1346000.0	-14896860.0	-20812.0
488.18	-47189.0	-4853.3	728.1	-1504000.0	-32824770.0	2391.0
488.19	-19042.8	-9011.5	1087.7	-2779000.0	-15648300.0	-64434.0
488.20	-47115.6	-9499.9	1227.6	-2936000.0	-33566160.0	-41230.0
488.21	-11793.3	-3302.9	435.3	-1018000.0	-9601191.0	-18379.0
488.22	-39866.3	-3793.1	578.6	-1176000.0	-27528100.0	4821.0
488.23	-11720.1	-7951.6	939.8	-2452000.0	-10349630.0	-62005.0
488.24	-39793.0	-8439.1	1077.5	-2608000.0	-28269520.0	-38798.0
488.25	-75261.8	-5348.9	864.6	-1665000.0	-50742630.0	25574.0
488.26	-19064.8	-7617.9	938.9	-2350000.0	-15423880.0	-51349.0
488.27	-75210.5	-8601.2	1209.3	-2668000.0	-51269620.0	-4961.0
488.28	-67939.1	-4288.8	713.3	-1337000.0	-45445960.0	28003.0
488.29	-11742.1	-6556.3	787.8	-2021000.0	-10125210.0	-48915.0
488.30	-67887.8	-7541.2	1058.1	-2340000.0	-45972950.0	-2531.0

488.31	-10707.6	-4220.2	539.6	-1300000.0	-9533912.0	-27811.0
488.32	-38780.5	-4708.6	685.7	-1457000.0	-27452800.0	-4606.0
488.33	-10656.3	-7474.1	894.2	-2303000.0	-10057910.0	-58348.0
488.34	-38729.2	-7962.8	1035.8	-2461000.0	-27979790.0	-35144.0
488.35	-3384.9	-3160.6	392.1	-972322.0	-4236242.0	-25383.0
488.36	-31457.8	-3648.3	536.2	-1129000.0	-22156120.0	-2175.0
488.37	-3333.7	-6411.9	741.9	-1974000.0	-4760260.0	-55912.0
488.38	-31406.5	-6901.6	886.7	-2132000.0	-22683120.0	-32711.0
488.39	-47137.6	-8106.8	1076.3	-2507000.0	-33341740.0	-28146.0
488.40	-39815.0	-7045.4	927.2	-2179000.0	-28045090.0	-25712.0
488.41	-36773.8	-4664.1	676.8	-1443000.0	-26164000.0	-6109.0
488.42	-64846.7	-5157.6	816.1	-1602000.0	-44081880.0	17081.0
488.43	-36700.5	-9311.8	1176.4	-2876000.0	-26915410.0	-49732.0
488.44	-64773.3	-9803.6	1310.6	-3035000.0	-44833270.0	-26538.0
488.45	-29451.1	-3603.6	527.2	-1115000.0	-20867330.0	-3677.0
488.46	-57524.0	-4097.7	666.0	-1275000.0	-38785210.0	19510.0
488.47	-29377.8	-8251.6	1028.6	-2548000.0	-21618740.0	-47302.0
488.48	-57450.6	-8743.5	1159.3	-2707000.0	-39536600.0	-24109.0
488.49	-92919.5	-5654.3	947.8	-1764000.0	-62009740.0	40261.0
488.50	-36722.5	-7918.1	1027.0	-2446000.0	-26690990.0	-36646.0
488.51	-92868.1	-8906.6	1292.2	-2767000.0	-62536710.0	9726.0
488.52	-85596.8	-4594.1	791.4	-1436000.0	-56713070.0	42691.0
488.53	-29399.8	-6857.0	877.9	-2118000.0	-21394320.0	-34214.0
488.54	-85545.4	-7846.9	1139.2	-2439000.0	-57240040.0	12155.0
488.55	-64795.3	-8410.7	1161.4	-2606000.0	-44608850.0	-13455.0
488.56	-57472.6	-7350.0	1011.0	-2278000.0	-39312180.0	-11024.0
488.57	-40137.2	-4721.6	693.5	-1461000.0	-28306790.0	-3309.0
488.58	-68210.0	-5215.8	832.5	-1621000.0	-46234650.0	19878.0
488.59	-40085.9	-7975.6	1043.4	-2465000.0	-28833780.0	-33847.0
488.60	-68158.7	-8468.7	1177.3	-2624000.0	-46751640.0	-10657.0
488.61	-32814.5	-3661.1	543.9	-1133000.0	-23010120.0	-878.0
488.62	-60887.3	-4156.2	681.7	-1294000.0	-40937980.0	22307.0
488.63	-32763.2	-6914.3	894.5	-2136000.0	-23537110.0	-31413.0
488.64	-60836.0	-7408.1	1027.0	-2296000.0	-41454970.0	-8226.0
488.108	-14664.3	-12528.9	-6408.0	-4575000.0	-9951134.0	-91690.0
488.109	-19222.5	-15584.3	-4319.2	-5448000.0	-14155870.0	-107908.0
488.110	-18177.6	-12481.1	-22167.8	-4265000.0	-13108930.0	-119156.0
488.111	-22733.5	-15522.1	-19747.4	-5125000.0	-17314080.0	-135325.0
488.112	-26022.6	4102.3	6136.8	1527000.0	-18588030.0	81517.0
488.113	-30581.3	1040.3	7681.0	651622.0	-22793890.0	65295.0
488.114	-29531.3	3040.6	-5110.9	1268000.0	-21747660.0	51399.0
488.115	-34088.5	-19.5	-3442.9	391855.0	-25953140.0	35138.0
488.116	-14847.7	-12466.5	-7554.7	-4520000.0	-10045630.0	-92525.0
488.117	-19407.9	-15515.5	-5488.4	-5389000.0	-14253870.0	-108765.0
488.118	-17995.6	-12561.8	-21193.5	-4352000.0	-13015780.0	-117783.0
488.119	-22551.9	-15598.8	-18765.9	-5209000.0	-17218030.0	-133974.0
488.120	-26205.7	4146.3	4861.9	1572000.0	-18684450.0	80662.0
488.121	-30764.7	1081.5	6415.4	694430.0	-22890390.0	64414.0
488.122	-29343.8	3029.1	-3774.4	1227000.0	-21640120.0	52918.0
488.123	-33900.8	-30.5	-2009.8	353990.0	-25845550.0	36643.0
488.124	-14728.8	-16167.9	-20607.0	-6450000.0	-10008490.0	-108655.0
488.125	-19287.1	-19224.2	-18475.7	-7323000.0	-14213240.0	-124901.0
488.126	-18242.4	-16205.8	-35388.1	-6173000.0	-13166360.0	-136332.0
488.127	-22800.7	-19256.9	-32978.6	-7042000.0	-17371120.0	-152535.0
488.128	-25952.6	6365.7	6208.6	2745000.0	-18530280.0	94050.0
488.129	-30512.1	3302.7	7800.0	1865000.0	-22736340.0	77868.0
488.130	-29464.5	5316.8	-5139.2	2482000.0	-21690720.0	63992.0
488.131	-34022.0	2253.8	-3541.0	1604000.0	-25896280.0	47721.0
488.132	-14915.5	-16107.5	-21725.8	-6391000.0	-10106830.0	-109644.0
488.133	-19474.9	-19157.6	-19592.1	-7259000.0	-14314860.0	-125941.0



488.134	-18059.6	-16260.4	-34417.5	-6239000.0	-13072010.0	-134993.0
488.135	-22616.2	-19296.7	-32024.8	-7096000.0	-17274340.0	-151178.0
488.136	-26143.2	6367.2	5038.1	2762000.0	-18638610.0	92963.0
488.137	-30700.5	3309.1	6603.5	1887000.0	-22844110.0	76774.0
488.138	-29278.0	5302.1	-3895.2	2440000.0	-21593440.0	65438.0
488.139	-33834.3	2241.5	-2200.0	1564000.0	-25788690.0	49201.0
488.140	-14538.0	-6283.8	20516.7	-2538000.0	-9286110.0	1591.0
488.141	-19097.0	-9244.3	21992.9	-3363000.0	-13492040.0	-14337.0
488.142	-26264.5	-7508.5	-31354.5	-2217000.0	-19839360.0	-93187.0
488.143	-30820.5	-10637.3	-29161.9	-3125000.0	-24044540.0	-109639.0
488.144	-17951.4	-1007.2	20150.6	-569805.0	-11885580.0	54413.0
488.145	-22510.4	-3965.5	21628.1	-1393000.0	-16087510.0	38492.0
488.146	-29667.7	-3149.2	-24634.2	-696703.0	-22432250.0	-43036.0
488.147	-34223.7	-6277.7	-22441.5	-1604000.0	-26627420.0	-59487.0
488.148	-14556.5	-7414.3	17048.7	-3121000.0	-9301801.0	-3618.0
488.149	-19114.5	-10472.6	19118.4	-3998000.0	-13506480.0	-19826.0
488.150	-26287.1	-8149.9	-34537.7	-2565000.0	-19865090.0	-96773.0
488.151	-30842.6	-11281.7	-32324.8	-3474000.0	-24060140.0	-113246.0
488.152	-17933.1	113.4	19907.1	8327.0	-11870940.0	59572.0
488.153	-22492.8	-2842.6	21373.1	-814827.0	-16073050.0	43670.0
488.154	-29646.5	-2490.2	-21554.0	-341894.0	-22406870.0	-39363.0
488.155	-34202.5	-5598.6	-19438.4	-1238000.0	-26612040.0	-55756.0
488.156	-15146.9	-6053.4	16275.3	-2344000.0	-9599496.0	-1073.0
488.157	-19706.8	-9008.4	17736.0	-3168000.0	-13806660.0	-16967.0
488.158	-25639.8	-7503.3	-28251.4	-2350000.0	-19500970.0	-87639.0
488.159	-30195.2	-10636.7	-26031.7	-3259000.0	-23705990.0	-104121.0
488.160	-18561.1	-774.2	15878.4	-376911.0	-12200170.0	51810.0
488.161	-23121.0	-3729.2	17339.1	-1200000.0	-16412330.0	35917.0
488.162	-29043.1	-3132.9	-21433.0	-822593.0	-22093880.0	-37497.0
488.163	-33598.5	-6266.0	-19214.4	-1731000.0	-26288900.0	-53977.0
488.164	-15164.3	-7224.1	13335.6	-2947000.0	-9612909.0	-6444.0
488.165	-19723.2	-10273.6	15353.7	-3820000.0	-13819820.0	-22607.0
488.166	-25661.1	-8160.0	-31461.3	-2704000.0	-19526370.0	-91268.0
488.167	-30216.9	-11295.7	-29235.8	-3615000.0	-23721500.0	-107756.0
488.168	-18544.8	354.1	15584.0	201207.0	-12188030.0	57064.0
488.169	-23104.6	-2600.8	17044.7	-621859.0	-16398170.0	41170.0
488.170	-29020.0	-2491.2	-18179.3	-472843.0	-22068020.0	-33944.0
488.171	-33576.0	-5617.5	-15996.2	-1379000.0	-26273190.0	-50390.0
488.268	-13318.3	-2870.8	848.6	-1293000.0	-8062855.0	-11168.0
488.269	-28513.8	-13059.2	7752.9	-4208000.0	-22079670.0	-65259.0
488.270	-16840.0	-2934.0	-15014.4	-1049000.0	-11233780.0	-38726.0
488.271	-32026.2	-13241.1	-7303.6	-4014000.0	-25240240.0	-93186.0
488.272	-16728.1	2281.5	4201.1	612955.0	-10657410.0	41276.0
488.273	-31925.1	-7734.4	9164.7	-2211000.0	-24684610.0	-12186.0
488.274	-20243.3	1516.7	-8315.7	512805.0	-13820690.0	11742.0
488.275	-35430.9	-8711.3	-1395.2	-2405000.0	-27833510.0	-42505.0
488.276	-13500.1	-2816.5	-237.3	-1241000.0	-8154950.0	-12039.0
488.277	-28699.0	-12989.1	6593.1	-4148000.0	-22176630.0	-66120.0
488.278	-16651.8	-2980.5	-14189.6	-1112000.0	-11132060.0	-37223.0
488.279	-31841.4	-13256.1	-6302.9	-4061000.0	-25143390.0	-91649.0
488.280	-16911.6	2353.6	2904.8	670798.0	-10752940.0	40522.0
488.281	-32108.1	-7695.8	7911.6	-2169000.0	-24771010.0	-13079.0
488.282	-20055.4	1525.4	-7202.3	478483.0	-13719050.0	13390.0
488.283	-35242.8	-8726.7	-187.0	-2448000.0	-27725810.0	-41002.0
488.284	-13337.6	-3967.0	-3413.1	-1858000.0	-8079749.0	-16281.0
488.285	-28533.2	-14154.1	3500.2	-4771000.0	-22094590.0	-70383.0
488.286	-16857.8	-4015.4	-19229.6	-1606000.0	-11249300.0	-43791.0
488.287	-32045.6	-14150.5	-11018.7	-4486000.0	-25255160.0	-97672.0
488.288	-16709.2	3147.2	4090.6	1067000.0	-10641620.0	45647.0
488.289	-31904.7	-7056.3	9205.3	-1847000.0	-24659440.0	-8415.0

488.290	-20222.6	2154.6	-7855.7	854619.1	-13803440.0	15379.0
488.291	-35410.7	-8022.2	-1434.8	-2038000.0	-27808380.0	-38714.0
488.292	-13520.9	-3905.3	-4558.6	-1805000.0	-8174224.0	-17102.0
488.293	-28717.6	-14088.0	2365.3	-4713000.0	-22191350.0	-71285.0
488.294	-16671.1	-4065.3	-18344.7	-1674000.0	-11148960.0	-42293.0
488.295	-31860.9	-14210.1	-10114.7	-4552000.0	-25158330.0	-96320.0
488.296	-16892.4	3192.3	2816.8	1112000.0	-10736070.0	44803.0
488.297	-32087.9	-7019.8	7953.1	-1805000.0	-24755890.0	-9340.0
488.298	-20034.7	2150.6	-6645.9	813760.0	-13700800.0	16982.0
488.299	-35223.9	-8034.1	-142.3	-2080000.0	-27711020.0	-37208.0
518.1	2433.3	-240.1	36.5	-262914.0	1702963.0	723.0
518.2	4409.2	-289.6	44.8	-315946.0	4397953.0	2417.0
518.3	3137.1	-477.7	65.4	-525662.0	1836412.0	-1680.0
518.4	5113.0	-525.9	73.7	-577341.0	4531401.0	14.0
518.5	1870.5	-184.5	28.4	-201966.0	1309023.0	553.0
518.6	3846.4	-234.2	36.7	-255237.0	4004255.0	2247.0
518.7	2574.3	-421.9	57.3	-464510.0	1442270.0	-1851.0
518.8	4550.2	-470.5	65.7	-516607.0	4137703.0	-157.0
518.9	6385.0	-340.4	53.4	-370523.0	7092917.0	4111.0
518.10	2926.0	-406.5	56.7	-446855.0	1795887.0	-959.0
518.11	6877.7	-505.9	73.7	-553639.0	7186841.0	2429.0
518.12	5822.3	-285.1	45.4	-309924.0	6699244.0	3940.0
518.13	2363.2	-350.7	48.6	-385755.0	1402318.0	-1130.0
518.14	6314.9	-450.7	65.7	-493106.0	6792143.0	2258.0
518.15	4901.9	-455.4	65.0	-499342.0	4490877.0	735.0
518.16	4339.1	-399.7	57.0	-438336.0	4097179.0	564.0
518.17	1542.9	-219.4	32.9	-240777.0	493122.3	-32.0
518.18	3518.8	-267.6	41.1	-292433.0	3188192.0	1662.0
518.19	2246.7	-456.7	61.9	-503093.0	626390.8	-2435.0
518.20	4222.6	-504.3	70.1	-554212.0	3321640.0	-741.0
518.21	980.1	-163.7	24.9	-179715.0	99181.4	-202.0
518.22	2956.0	-212.2	33.1	-231694.0	2794494.0	1492.0
518.23	1683.9	-401.3	53.8	-442451.0	232440.8	-2605.0
518.24	3659.8	-448.6	62.0	-493171.0	2927943.0	-911.0
518.25	5494.6	-318.3	49.6	-346799.0	5883156.0	3356.0
518.26	2035.6	-385.8	53.1	-424744.0	586435.4	-1714.0
518.27	5987.3	-483.8	69.9	-529851.0	5977080.0	1674.0
518.28	4931.9	-262.9	41.6	-286079.0	5489483.0	3186.0
518.29	1472.8	-329.8	45.1	-363346.0	192491.4	-1884.0
518.30	5424.5	-428.4	61.9	-469167.0	5582382.0	1503.0
518.31	949.2	-205.3	30.6	-225675.0	-313461.3	-535.0
518.32	2925.2	-253.1	38.7	-276863.0	2381685.0	1159.0
518.33	1442.0	-371.6	50.8	-409533.0	-220111.9	-2217.0
518.34	3417.8	-419.5	58.9	-460840.0	2474583.0	-523.0
518.35	386.5	-150.1	22.5	-165175.0	-707379.9	-705.0
518.36	2362.4	-197.6	30.6	-216044.0	1987987.0	989.0
518.37	879.2	-315.4	42.7	-347898.0	-614053.9	-2387.0
518.38	2855.1	-363.6	50.9	-399629.0	2080911.0	-693.0
518.39	4011.4	-433.7	61.4	-476079.0	3281091.0	-20.0
518.40	3448.7	-377.8	53.3	-414777.0	2887418.0	-190.0
518.41	2789.5	-248.5	37.9	-271926.0	2187278.0	1025.0
518.42	4765.4	-298.4	46.3	-325379.0	4882267.0	2719.0
518.43	3493.3	-485.7	66.8	-534214.0	2319726.0	-1378.0
518.44	5469.1	-534.7	75.2	-586810.0	5015690.0	316.0
518.45	2226.7	-193.0	29.8	-211033.0	1792580.0	854.0
518.46	4202.6	-243.1	38.2	-264746.0	4488569.0	2548.0
518.47	2930.5	-430.3	58.8	-473483.0	1926028.0	-1549.0
518.48	4906.4	-479.3	67.2	-526109.0	4621018.0	145.0
518.49	6741.2	-349.4	54.9	-380144.0	7577231.0	4413.0
518.50	3282.2	-414.8	58.1	-455815.0	2280202.0	-657.0

518.51	7233.8	-514.8	75.2	-563176.0	7670130.0	2731.0
518.52	6178.4	-293.9	46.9	-319360.0	7183534.0	4242.0
518.53	2719.4	-359.0	50.1	-394660.0	1886504.0	-828.0
518.54	6671.1	-459.6	67.2	-502637.0	7276457.0	2560.0
518.55	5258.0	-464.2	66.5	-508789.0	4975166.0	1037.0
518.56	4695.2	-408.5	58.5	-447808.0	4581468.0	866.0
518.57	3026.9	-254.2	38.8	-277968.0	2509471.0	1226.0
518.58	5002.8	-304.3	47.3	-331747.0	5204460.0	2920.0
518.59	3519.6	-420.5	59.1	-461905.0	2602395.0	-456.0
518.60	5495.5	-470.0	67.5	-515085.0	5298384.0	1238.0
518.61	2464.2	-198.6	30.8	-217095.0	2115798.0	1056.0
518.62	4440.0	-249.2	39.2	-271268.0	4810762.0	2750.0
518.63	2956.8	-364.6	51.0	-400625.0	2208697.0	-626.0
518.64	4932.7	-414.4	59.5	-454125.0	4903686.0	1067.0
518.108	1938.0	-2346.1	4528.2	-2368000.0	-554620.1	591.0
518.109	2289.9	-2360.1	5981.5	-2392000.0	85089.2	-441.0
518.110	3050.4	-2216.9	-4409.2	-2484000.0	1290304.0	4326.0
518.111	3401.3	-2206.1	-2963.6	-2478000.0	1928400.0	3289.0
518.112	906.1	1330.7	3366.7	1516000.0	799903.7	-4107.0
518.113	1258.4	1307.9	4817.2	1482000.0	1440067.0	-5139.0
518.114	2018.3	909.3	-5876.5	856207.0	2643740.0	-378.0
518.115	2369.8	901.4	-4436.0	838368.0	3282863.0	-1413.0
518.116	2032.8	-2357.9	2205.0	-2442000.0	-412699.6	1024.0
518.117	2385.5	-2359.8	3652.0	-2457000.0	228459.5	-5.3
518.118	2955.6	-2186.6	-2213.8	-2381000.0	1149277.0	3896.0
518.119	3306.7	-2183.1	-754.3	-2384000.0	1787474.0	2859.0
518.120	1000.8	1309.8	1041.5	1432000.0	941654.9	-3674.0
518.121	1353.1	1285.7	2491.5	1397000.0	1582079.0	-4706.0
518.122	1920.7	959.9	-3560.2	973953.0	2497994.0	-816.0
518.123	2272.1	953.9	-2116.3	959020.0	3137091.0	-1851.0
518.124	1955.1	-4586.0	7047.1	-4679000.0	-534284.4	543.0
518.125	2307.0	-4598.3	8497.2	-4702000.0	104961.9	-489.0
518.126	3067.6	-4467.3	-1962.9	-4791000.0	1310407.0	4280.0
518.127	3419.5	-4455.9	-556.0	-4781000.0	1950014.0	3246.0
518.128	887.5	2914.9	965.7	3140000.0	779084.6	-4066.0
518.129	1240.0	2889.5	2412.6	3102000.0	1419402.0	-5097.0
518.130	2000.7	2486.2	-8333.3	2468000.0	2624278.0	-334.0
518.131	2352.4	2476.1	-6894.8	2447000.0	3263451.0	-1369.0
518.132	2050.9	-4585.1	4717.4	-4745000.0	-390837.3	981.0
518.133	2403.4	-4585.0	6167.1	-4756000.0	249780.0	-50.0
518.134	2972.8	-4458.5	312.4	-4716000.0	1168765.0	3847.0
518.135	3324.1	-4454.2	1771.6	-4718000.0	1807165.0	2811.0
518.136	985.3	2886.2	-1472.8	3054000.0	925982.8	-3623.0
518.137	1336.8	2863.3	3.4	3018000.0	1564946.0	-4657.0
518.138	1903.7	2532.0	-6002.5	2579000.0	2479683.0	-770.0
518.139	2254.9	2527.3	-4578.1	2565000.0	3118730.0	-1806.0
518.140	278.6	-927.2	14611.2	-598664.0	-2236361.0	-5427.0
518.141	630.9	-904.2	16058.8	-582797.0	-1596035.0	-6458.0
518.142	3996.9	-1301.6	-15449.6	-1781000.0	3927414.0	7045.0
518.143	4347.8	-1332.4	-13998.7	-1822000.0	4565385.0	6009.0
518.144	-28.2	288.9	14293.5	687850.0	-1826150.0	-6829.0
518.145	324.0	312.8	15741.1	704673.0	-1185850.0	-7860.0
518.146	3685.6	-492.0	-15878.8	-916073.1	4332484.0	5631.0
518.147	4036.5	-522.6	-14428.0	-956155.9	4970455.0	4594.0
518.148	283.2	-1612.0	15356.8	-1306000.0	-2231195.0	-5442.0
518.149	635.0	-1628.4	16806.4	-1334000.0	-1591996.0	-6475.0
518.150	4003.6	-1763.7	-14713.2	-2251000.0	3935113.0	7035.0
518.151	4354.3	-1795.8	-13261.8	-2293000.0	4573033.0	5998.0
518.152	-32.6	960.8	13552.9	1384000.0	-1831266.0	-6814.0
518.153	319.9	985.8	14999.8	1402000.0	-1190889.0	-7844.0

518.154	3679.6	-22.5	-16616.8	-438659.0	4324963.0	5643.0
518.155	4030.6	-45.1	-15166.2	-469900.0	4963959.0	4606.0
518.156	593.6	-960.7	6859.7	-839416.0	-1765493.0	-3986.0
518.157	946.3	-935.2	8306.4	-820925.0	-1124066.0	-5016.0
518.158	3673.5	-1124.8	-7753.5	-1382000.0	3444416.0	5586.0
518.159	4024.1	-1157.5	-6303.3	-1424000.0	4082311.0	4548.0
518.160	287.2	256.3	6542.7	447812.0	-1354181.0	-5387.0
518.161	639.9	281.8	7989.4	466309.0	-713801.4	-6418.0
518.162	3362.2	-309.9	-8182.6	-511274.0	3848486.0	4172.0
518.163	3712.8	-342.6	-6731.0	-553462.0	4486381.0	3135.0
518.164	597.6	-1661.0	7605.2	-1564000.0	-1760479.0	-4002.0
518.165	949.8	-1673.5	9053.9	-1587000.0	-1120178.0	-5034.0
518.166	3679.6	-1594.0	-7015.9	-1859000.0	3450963.0	5573.0
518.167	4030.4	-1626.4	-5573.1	-1900000.0	4088908.0	4537.0
518.168	283.8	931.6	5801.2	1148000.0	-1358043.0	-5370.0
518.169	636.5	957.2	7248.0	1166000.0	-717564.4	-6400.0
518.170	3355.2	152.3	-8918.1	-41560.0	3840711.0	4182.0
518.171	3706.1	122.6	-7467.2	-80672.0	4478682.0	3145.0
518.268	1164.6	-890.8	2320.8	-818880.0	-829715.6	146.0
518.269	2337.9	-949.5	7199.7	-915363.9	1303326.0	-3293.0
518.270	2281.5	-873.1	-6635.9	-1045000.0	1021608.0	3894.0
518.271	3450.9	-919.7	-1811.5	-1119000.0	3147976.0	438.0
518.272	855.8	281.6	2004.0	417883.0	-422383.9	-1260.0
518.273	2030.6	292.0	6836.1	400434.0	1711859.0	-4698.0
518.274	1970.2	-21.2	-7069.2	-135214.0	1425709.0	2479.0
518.275	3140.6	-44.2	-2238.8	-183154.0	3553299.0	-975.0
518.276	1258.6	-906.9	-3.4	-897633.0	-688882.0	578.0
518.277	2433.7	-947.5	4868.8	-977619.1	1446713.0	-2857.0
518.278	2184.1	-841.4	-4326.1	-947530.9	876092.6	3455.0
518.279	3355.1	-879.8	470.0	-1011000.0	3004686.0	3.1
518.280	950.8	272.7	-321.5	346834.0	-280423.7	-827.0
518.281	2125.2	270.8	4496.9	316894.0	1853845.0	-4265.0
518.282	1872.9	35.0	-4759.8	-12061.0	1280367.0	2041.0
518.283	3043.1	-3.1	93.6	-77094.0	3407578.0	-1414.0
518.284	1169.6	-1563.6	3068.4	-1513000.0	-824447.9	132.0
518.285	2343.1	-1622.3	7954.2	-1610000.0	1309340.0	-3307.0
518.286	2285.9	-1532.3	-5881.2	-1723000.0	1026397.0	3878.0
518.287	3456.1	-1501.1	-1067.9	-1713000.0	3153294.0	424.0
518.288	851.2	840.0	1274.8	993503.0	-427561.2	-1246.0
518.289	2025.1	766.1	6114.3	886037.0	1706464.0	-4685.0
518.290	1964.7	435.6	-7803.7	330909.0	1419604.0	2492.0
518.291	3135.2	431.3	-2976.1	302903.0	3546930.0	-962.0
518.292	1264.4	-1576.5	744.4	-1589000.0	-682411.4	565.0
518.293	2438.5	-1622.8	5625.8	-1674000.0	1452042.0	-2873.0
518.294	2189.1	-1499.1	-3596.6	-1623000.0	881909.3	3441.0
518.295	3360.3	-1488.6	1225.1	-1634000.0	3011004.0	-11.0
518.296	946.0	819.1	-1049.5	909588.9	-285749.7	-813.0
518.297	2119.9	743.8	3780.5	800752.0	1848501.0	-4252.0
518.298	1867.3	486.9	-5493.9	448550.0	1274190.0	2053.0
518.299	3038.2	484.4	-678.2	424320.0	3402336.0	-1398.0
580.1	-4058.2	-120.9	34.5	-58015.0	-3223957.0	9807.0
580.2	-6192.2	-152.8	45.0	-81470.0	-4788033.0	21068.0
580.3	-4977.7	-265.0	75.5	-151558.0	-3635096.0	7475.0
580.4	-7111.7	-296.0	85.9	-174036.0	-5199172.0	18736.0
580.5	-3120.4	-92.6	26.5	-44064.0	-2479178.0	7541.0
580.6	-5254.4	-124.8	37.0	-67742.0	-4043253.0	18803.0
580.7	-4039.9	-236.6	67.4	-137406.0	-2890317.0	5209.0
580.8	-6173.9	-268.0	77.9	-160356.0	-4454392.0	16471.0
580.9	-8326.3	-186.3	55.9	-106589.0	-6352133.0	32329.0
580.10	-4701.8	-221.8	63.2	-123504.0	-3512142.0	8175.0

580.11	-8969.9	-286.7	84.6	-171661.0	-6639318.0	30697.0
580.12	-7388.5	-158.4	48.0	-93033.0	-5607355.0	30064.0
580.13	-3764.0	-193.4	55.1	-109392.0	-2767362.0	5909.0
580.14	-8032.1	-258.9	76.7	-158116.0	-5894539.0	28432.0
580.15	-6835.9	-253.4	73.7	-146656.0	-5075243.0	19436.0
580.16	-5898.1	-225.2	65.7	-132704.0	-4331464.0	17170.0
580.17	-3095.5	-108.1	30.2	-49261.0	-2530864.0	4719.0
580.18	-5229.6	-138.9	40.4	-71357.0	-4094965.0	15981.0
580.19	-4015.0	-251.8	71.1	-142260.0	-2942003.0	2388.0
580.20	-6149.1	-282.3	81.3	-164127.0	-4506105.0	13649.0
580.21	-2157.7	-79.8	22.2	-35197.0	-1786085.0	2454.0
580.22	-4291.8	-110.8	32.4	-57594.0	-3350186.0	13715.0
580.23	-3077.2	-223.9	63.1	-128636.0	-2197224.0	122.0
580.24	-5211.3	-254.0	73.3	-150108.0	-3761325.0	11383.0
580.25	-7363.6	-172.1	51.2	-96160.0	-5658041.0	27242.0
580.26	-3739.2	-209.0	58.8	-114678.0	-2818074.0	3087.0
580.27	-8007.3	-272.4	79.9	-161140.0	-5946251.0	25610.0
580.28	-6425.8	-144.1	43.3	-82482.0	-4914262.0	24976.0
580.29	-2801.4	-180.4	50.7	-100275.0	-2074295.0	821.0
580.30	-7069.5	-244.5	72.0	-147498.0	-5201472.0	23344.0
580.31	-2453.8	-99.3	27.3	-43064.0	-2068161.0	1328.0
580.32	-4587.8	-129.7	37.4	-64734.0	-3632237.0	12589.0
580.33	-3097.4	-200.1	55.9	-108333.0	-2356346.0	-305.0
580.34	-5231.5	-230.6	66.1	-130282.0	-3920447.0	10957.0
580.35	-1516.0	-71.5	19.3	-29533.0	-1323874.0	-938.0
580.36	-3650.0	-101.6	29.4	-50896.0	-2887458.0	10323.0
580.37	-2159.6	-171.2	47.7	-93694.0	-1611567.0	-2570.0
580.38	-4293.7	-202.2	58.0	-116099.0	-3175668.0	8691.0
580.39	-5873.2	-239.6	69.1	-136687.0	-4382150.0	14348.0
580.40	-4935.4	-211.1	61.0	-122414.0	-3637371.0	12083.0
580.41	-4443.2	-126.1	36.2	-61690.0	-3500574.0	11842.0
580.42	-6577.3	-158.4	46.8	-85549.0	-5064674.0	23103.0
580.43	-5362.7	-269.9	77.2	-154826.0	-3912713.0	9510.0
580.44	-7496.8	-301.7	87.8	-178213.0	-5475814.0	20771.0
580.45	-3505.5	-97.9	28.2	-47787.0	-2756820.0	9576.0
580.46	-5639.5	-130.5	38.9	-71899.0	-4319896.0	20838.0
580.47	-4424.9	-241.8	69.2	-141088.0	-3167934.0	7244.0
580.48	-6559.0	-273.7	79.8	-164540.0	-4732035.0	18506.0
580.49	-8711.3	-192.1	57.8	-110857.0	-6628750.0	34364.0
580.50	-5086.9	-227.0	64.9	-127149.0	-3788784.0	10210.0
580.51	-9355.0	-292.4	86.5	-175868.0	-6916960.0	32732.0
580.52	-7773.5	-164.0	49.9	-97132.0	-5883971.0	32099.0
580.53	-4149.1	-198.6	56.9	-113009.0	-3044004.0	7944.0
580.54	-8417.2	-264.6	78.6	-162314.0	-6172181.0	30467.0
580.55	-7220.9	-259.0	75.5	-150791.0	-5352860.0	21471.0
580.56	-6283.1	-230.8	67.6	-136867.0	-4608080.0	19205.0
580.57	-4700.0	-129.6	37.4	-64180.0	-3685685.0	13198.0
580.58	-6834.0	-162.2	48.1	-88346.0	-5249761.0	24460.0
580.59	-5343.6	-230.5	66.1	-129695.0	-3973870.0	11566.0
580.60	-7477.6	-262.8	76.8	-153558.0	-5537946.0	22828.0
580.61	-3762.2	-101.4	29.4	-50292.0	-2940906.0	10933.0
580.62	-5896.2	-134.4	40.2	-74862.0	-4504982.0	22194.0
580.63	-4405.8	-202.0	58.0	-115445.0	-3229091.0	9301.0
580.64	-6539.8	-234.6	68.8	-139640.0	-4793167.0	20562.0
580.108	-4313.1	-1310.1	3559.6	-1344000.0	-887490.5	9018.0
580.109	-4958.0	-1407.7	4537.8	-1439000.0	-1427513.0	11274.0
580.110	-5289.6	-2636.3	-2986.4	-2590000.0	-2226037.0	6597.0
580.111	-5934.5	-2698.1	-2009.3	-2639000.0	-2765693.0	8852.0
580.112	-1043.6	2031.4	2224.8	2117000.0	-2522605.0	4368.0
580.113	-1688.6	1931.8	3204.9	2021000.0	-3063145.0	6623.0



580.114	-2021.3	461.4	-4476.4	636829.0	-3861501.0	1947.0
580.115	-2666.2	369.9	-3490.7	547249.0	-4402015.0	4202.0
580.116	-4374.3	-1705.8	1503.9	-1724000.0	-1009287.0	8852.0
580.117	-5019.1	-1818.2	2543.2	-1839000.0	-1549397.0	11108.0
580.118	-5227.8	-2178.8	-953.2	-2146000.0	-2104209.0	6763.0
580.119	-5872.7	-2250.7	24.0	-2205000.0	-2644023.0	9018.0
580.120	-1104.9	1631.5	172.0	1733000.0	-2644148.0	4201.0
580.121	-1749.8	1529.2	1153.3	1634000.0	-3184662.0	6457.0
580.122	-1959.4	897.9	-2443.2	1062000.0	-3739806.0	2111.0
580.123	-2604.3	810.1	-1458.7	978266.0	-4279321.0	4366.0
580.124	-4278.5	-3308.3	5514.3	-3321000.0	-887698.8	8850.0
580.125	-4923.3	-3406.9	6501.1	-3416000.0	-1427684.0	11105.0
580.126	-5255.1	-4576.4	-1082.6	-4488000.0	-2226255.0	6429.0
580.127	-5899.9	-4625.6	-105.9	-4524000.0	-2765920.0	8685.0
580.128	-1078.3	3480.5	344.2	3542000.0	-2523403.0	4533.0
580.129	-1723.2	3374.6	1326.6	3436000.0	-3062918.0	6789.0
580.130	-2055.7	1880.6	-6278.2	2018000.0	-3862223.0	2112.0
580.131	-2700.7	1785.6	-5291.3	1923000.0	-4401763.0	4368.0
580.132	-4339.4	-3728.6	3540.5	-3733000.0	-1009501.0	8684.0
580.133	-4984.3	-3832.6	4568.3	-3837000.0	-1549597.0	10940.0
580.134	-5193.6	-4161.0	951.2	-4087000.0	-2104445.0	6595.0
580.135	-5838.6	-4232.7	1929.1	-4147000.0	-2644377.0	8851.0
580.136	-1139.3	3107.6	-1706.3	3186000.0	-2644870.0	4368.0
580.137	-1784.2	2993.6	-723.9	3072000.0	-3185384.0	6624.0
580.138	-1993.9	2311.7	-4260.8	2436000.0	-3740554.0	2276.0
580.139	-2638.8	2222.3	-3258.7	2348000.0	-4280068.0	4532.0
580.140	-2030.2	1437.5	11054.4	1321000.0	102098.8	10216.0
580.141	-2675.1	1379.4	12025.8	1270000.0	-437941.6	12472.0
580.142	-5287.4	-3239.6	-11290.9	-3043000.0	-4361621.0	2154.0
580.143	-5932.3	-3346.5	-10303.3	-3144000.0	-4902135.0	4409.0
580.144	-1049.6	2554.3	10584.6	2488000.0	-388705.1	8824.0
580.145	-1694.5	2497.0	11555.8	2438000.0	-928746.5	11080.0
580.146	-4306.6	-2427.8	-11711.0	-2200000.0	-4852939.0	757.0
580.147	-4951.5	-2534.5	-10723.4	-2301000.0	-5392453.0	3012.0
580.148	-2019.8	823.7	11654.3	710249.0	102106.7	10165.0
580.149	-2664.6	727.2	12634.3	616373.0	-437883.3	12421.0
580.150	-5277.4	-3646.1	-10757.2	-3433000.0	-4362085.0	2106.0
580.151	-5922.2	-3754.4	-9769.1	-3535000.0	-4901574.0	4361.0
580.152	-1060.2	3164.7	9982.9	3100000.0	-388800.7	8875.0
580.153	-1705.1	3108.6	10953.7	3052000.0	-928863.1	11132.0
580.154	-4316.8	-2013.7	-12246.8	-1802000.0	-4852525.0	806.0
580.155	-4961.6	-2112.5	-11261.1	-1894000.0	-5392014.0	3061.0
580.156	-2234.2	135.6	4206.4	75878.0	-303782.4	9660.0
580.157	-2879.2	80.0	5177.1	27554.0	-843879.2	11917.0
580.158	-5082.1	-1772.9	-4520.0	-1623000.0	-3954567.0	2703.0
580.159	-5726.9	-1881.3	-3531.7	-1725000.0	-4495056.0	4957.0
580.160	-1253.7	1253.6	3736.0	1243000.0	-794635.6	8268.0
580.161	-1898.7	1198.0	4706.7	1195000.0	-1334732.0	10525.0
580.162	-4101.2	-957.9	-4940.5	-776564.0	-4445860.0	1305.0
580.163	-4746.1	-1066.7	-3952.2	-879336.1	-4985374.0	3560.0
580.164	-2223.6	-494.3	4810.5	-553018.0	-303687.8	9608.0
580.165	-2868.6	-587.0	5789.3	-643189.0	-843761.5	11864.0
580.166	-5072.0	-2185.2	-3984.8	-2018000.0	-3955006.0	2654.0
580.167	-5716.8	-2291.0	-2996.7	-2118000.0	-4494495.0	4908.0
580.168	-1264.4	1867.8	3132.8	1859000.0	-794824.6	8321.0
580.169	-1909.3	1812.2	4103.5	1811000.0	-1334896.0	10577.0
580.170	-4111.2	-552.0	-5473.8	-387468.0	-4445395.0	1353.0
580.171	-4756.1	-657.9	-4486.3	-487367.0	-4984909.0	3608.0
580.268	-2416.5	83.9	2019.0	79858.0	-829458.6	4758.0
580.269	-4565.9	-240.9	5240.4	-233643.0	-2629684.0	12277.0

580.270	-3393.6	-1249.4	-4696.2	-1164000.0	-2168447.0	2341.0
580.271	-5543.0	-1553.9	-1414.0	-1446000.0	-3968428.0	9857.0
580.272	-1435.6	1150.7	1563.0	1187000.0	-1320046.0	3364.0
580.273	-3585.5	900.2	4810.3	957976.9	-3120104.0	10884.0
580.274	-2412.7	-401.1	-5124.0	-283177.0	-2659740.0	944.0
580.275	-4562.4	-682.1	-1848.1	-536700.0	-4458797.0	8461.0
580.276	-2477.6	-312.8	-34.5	-300187.0	-951167.5	4591.0
580.277	-4627.1	-645.2	3238.1	-626579.0	-2751201.0	12111.0
580.278	-3331.9	-827.5	-2661.0	-756627.0	-2046803.0	2505.0
580.279	-5481.4	-1114.4	617.3	-1019000.0	-3845809.0	10023.0
580.280	-1496.9	761.5	-492.0	814411.0	-1441539.0	3198.0
580.281	-3646.7	497.6	2769.1	570462.0	-3241621.0	10718.0
580.282	-2351.1	40.6	-3092.6	144707.0	-2537122.0	1108.0
580.283	-4500.7	-259.9	185.8	-128218.0	-4337153.0	8625.0
580.284	-2406.1	-516.4	2613.4	-514653.0	-829477.6	4708.0
580.285	-4555.5	-841.8	5827.9	-1828167.0	-2630047.0	12227.0
580.286	-3383.2	-1829.2	-4125.8	-1734000.0	-2168810.0	2290.0
580.287	-5532.8	-2058.8	-860.1	-1934000.0	-3967842.0	9807.0
580.288	-1446.1	1659.6	982.9	1692000.0	-1320178.0	3415.0
580.289	-3595.8	1332.7	4248.3	1382000.0	-3120715.0	10934.0
580.290	-2423.0	9.6	-5661.7	115056.0	-2659352.0	994.0
580.291	-4572.8	-254.2	-2389.2	-120111.0	-4459434.0	8511.0
580.292	-2467.3	-909.7	557.1	-891643.0	-951270.9	4541.0
580.293	-4616.7	-1242.3	3812.2	-1216000.0	-2751564.0	12061.0
580.294	-3321.5	-1400.7	-2090.3	-1321000.0	-2046166.0	2455.0
580.295	-5471.2	-1643.7	1174.2	-1532000.0	-3846223.0	9973.0
580.296	-1507.3	1259.6	-1069.8	1308000.0	-1442176.0	3248.0
580.297	-3657.1	927.9	2206.0	992272.0	-3242258.0	10768.0
580.298	-2361.3	446.0	-3628.6	536870.0	-2536708.0	1158.0
580.299	-4510.9	189.8	-357.3	312155.0	-4336739.0	8675.0
593.1	2449.0	257.0	38.2	280362.0	1638944.0	-723.0
593.2	4442.6	317.4	49.3	344553.0	4297421.0	-2438.0
593.3	3151.8	492.5	65.8	540790.0	1747105.0	1686.0
593.4	5145.4	554.5	77.0	606745.0	4405616.0	-29.0
593.5	1882.6	197.5	29.7	215386.0	1259836.0	-552.0
593.6	3876.2	257.6	40.8	279286.0	3917811.0	-2268.0
593.7	2585.4	433.2	57.3	475995.0	1368034.0	1857.0
593.8	4579.0	494.8	68.4	541488.0	4026006.0	142.0
593.9	6436.2	376.3	60.3	407151.0	6954899.0	-4153.0
593.10	2940.9	421.8	57.6	462649.0	1714617.0	964.0
593.11	6928.2	542.2	79.7	590595.0	7030646.0	-2467.0
593.12	5869.8	316.4	51.8	341763.0	6576288.0	-3983.0
593.13	2374.5	362.5	49.1	397807.0	1335548.0	1134.0
593.14	6361.8	482.3	71.2	525163.0	6652035.0	-2296.0
593.15	4934.5	483.1	68.6	527792.0	4373143.0	-752.0
593.16	4368.1	423.5	60.1	462742.0	3993532.0	-581.0
593.17	1550.7	229.4	33.3	251044.0	445651.0	41.0
593.18	3544.2	291.2	44.5	316777.0	3103632.0	-1674.0
593.19	2253.4	465.2	61.0	511773.0	553799.6	2451.0
593.20	4247.0	527.8	72.1	578357.0	3211827.0	736.0
593.21	984.3	170.0	24.8	186182.0	66575.3	212.0
593.22	2977.8	231.5	36.0	251535.0	2725021.0	-1503.0
593.23	1687.0	405.5	52.5	446557.0	174733.8	2621.0
593.24	3680.6	468.4	63.6	513484.0	2833216.0	906.0
593.25	5537.8	350.3	55.5	379545.0	5762110.0	-3389.0
593.26	2042.6	394.2	52.7	433235.0	521342.3	1728.0
593.27	6029.8	516.2	74.8	563047.0	5837856.0	-1703.0
593.28	4971.4	290.5	47.0	314286.0	5382499.0	-3219.0
593.29	1476.2	335.0	44.2	368641.0	142269.5	1899.0
593.30	5463.4	456.5	66.3	497748.0	5458246.0	-1532.0

593.31	951.8	211.3	30.1	231810.0	-349869.1	551.0
593.32	2945.3	273.6	41.2	298131.0	2307781.0	-1164.0
593.33	1443.7	376.1	49.5	414022.0	-274187.9	2238.0
593.34	3437.2	438.5	60.6	480412.0	2383502.0	522.0
593.35	385.4	151.4	21.6	166460.0	-728941.8	722.0
593.36	2378.9	214.0	32.7	232998.0	1929170.0	-994.0
593.37	877.3	317.2	41.0	349627.0	-653262.6	2408.0
593.38	2870.8	379.2	52.1	415666.0	2004891.0	693.0
593.39	4036.1	456.5	63.8	499593.0	3179353.0	13.0
593.40	3469.8	397.4	55.3	434936.0	2800768.0	183.0
593.41	2808.4	267.9	40.2	291962.0	2116070.0	-1029.0
593.42	4801.9	327.8	51.3	355640.0	4774522.0	-2744.0
593.43	3511.1	503.8	67.8	552817.0	2224240.0	1381.0
593.44	5504.7	564.9	78.9	617814.0	4882717.0	-335.0
593.45	2242.0	208.4	31.7	226932.0	1737459.0	-858.0
593.46	4235.6	268.0	42.7	290314.0	4394937.0	-2573.0
593.47	2944.7	444.2	59.3	487663.0	1845629.0	1551.0
593.48	4938.3	505.2	70.4	552529.0	4503106.0	-164.0
593.49	6795.6	386.5	62.3	418086.0	7432024.0	-4459.0
593.50	3300.3	432.8	59.5	474314.0	2191791.0	658.0
593.51	7287.5	552.5	81.6	601590.0	7508746.0	-2773.0
593.52	6229.2	326.8	53.8	352834.0	7053414.0	-4289.0
593.53	2733.9	373.5	51.0	409514.0	1813181.0	829.0
593.54	6721.1	492.6	73.1	536157.0	7129135.0	-2602.0
593.55	5293.9	493.5	70.6	538874.0	4850269.0	-1057.0
593.56	4727.5	434.0	62.1	473804.0	4470658.0	-887.0
593.57	3047.9	275.1	41.5	299666.0	2434795.0	-1232.0
593.58	5041.5	334.7	52.5	362970.0	5092273.0	-2948.0
593.59	3539.8	440.0	60.8	481987.0	2510517.0	454.0
593.60	5533.5	500.5	71.9	546260.0	5168019.0	-1261.0
593.61	2481.5	215.6	33.0	234610.0	2055184.0	-1062.0
593.62	4475.1	274.8	44.0	297528.0	4713662.0	-2777.0
593.63	2973.5	380.8	52.3	417302.0	2130931.0	625.0
593.64	4967.1	440.9	63.4	481174.0	4789408.0	-1091.0
593.108	988.3	-2389.5	680.6	-2612000.0	977734.5	3666.0
593.109	1328.4	-2265.9	2143.7	-2460000.0	1587816.0	4686.0
593.110	1900.9	-1484.5	-3774.8	-1542000.0	2507973.0	844.0
593.111	2240.8	-1374.5	-2325.8	-1404000.0	3117155.0	1865.0
593.112	2096.5	1456.7	2353.6	1476000.0	-500432.4	-1055.0
593.113	2437.3	1535.1	3817.7	1580000.0	111161.4	-39.0
593.114	3014.9	1722.3	-1982.3	1881000.0	1039891.0	-3900.0
593.115	3354.3	1794.9	-507.6	1973000.0	1649195.0	-2877.0
593.116	894.0	-2399.7	3021.3	-2685000.0	835369.8	4104.0
593.117	1234.1	-2276.3	4484.2	-2534000.0	1445906.0	5124.0
593.118	1998.3	-1464.6	-6103.3	-1458000.0	2653669.0	400.0
593.119	2338.2	-1353.7	-4654.7	-1319000.0	3263851.0	1422.0
593.120	2002.3	1442.3	4692.3	1397000.0	-643316.9	-618.0
593.121	2342.3	1531.7	6164.8	1509000.0	-32521.9	402.0
593.122	3109.0	1765.2	-4211.5	1998000.0	1181136.0	-4335.0
593.123	3448.3	1831.0	-2753.3	2082000.0	1790314.0	-3312.0
593.124	1030.0	-4830.1	-2150.5	-5165000.0	874816.5	3562.0
593.125	1369.6	-4712.4	-689.3	-5020000.0	1484262.0	4583.0
593.126	1940.2	-3951.3	-6580.1	-4113000.0	2401938.0	745.0
593.127	2280.3	-3839.6	-5131.9	-3973000.0	3012170.0	1766.0
593.128	2068.7	2992.6	5123.7	3036000.0	-377116.1	-987.0
593.129	2408.3	3068.1	6601.1	3131000.0	232600.5	34.0
593.130	2986.6	3298.9	798.9	3472000.0	1161619.0	-3826.0
593.131	3326.0	3370.5	2274.7	3562000.0	1770844.0	-2803.0
593.132	933.4	-4849.9	252.9	-5245000.0	728769.6	4007.0
593.133	1273.5	-4728.0	1716.4	-5095000.0	1338896.0	5027.0

593.134	2037.6	-3928.9	-8909.0	-4026000.0	2547634.0	302.0
593.135	2377.5	-3815.8	-7460.3	-3884000.0	3157815.0	1323.0
593.136	1973.4	2988.9	7467.0	2964000.0	-521644.4	-545.0
593.137	2312.9	3072.3	8944.0	3068000.0	88309.8	476.0
593.138	3081.0	3311.1	-1541.9	3548000.0	1304087.0	-4265.0
593.139	3420.5	3384.7	-68.4	3641000.0	1913268.0	-3243.0
593.140	310.9	-1848.3	6251.6	-2174000.0	-1330171.0	5328.0
593.141	650.6	-1691.4	7718.6	-1987000.0	-719789.4	6348.0
593.142	3362.7	387.2	-8143.6	592770.0	3787613.0	-4116.0
593.143	3702.2	434.3	-6683.0	659001.0	4397693.0	-3093.0
593.144	640.8	-554.9	6726.7	-798453.0	-1777525.0	3919.0
593.145	980.6	-397.1	8193.9	-610313.0	-1167369.0	4939.0
593.146	3697.6	1181.9	-7580.4	1440000.0	3348527.0	-5540.0
593.147	4037.1	1229.0	-6122.2	1506000.0	3957607.0	-4518.0
593.148	322.8	-2591.8	5419.3	-2951000.0	-1362154.0	5298.0
593.149	662.9	-2468.9	6882.8	-2800000.0	-751052.6	6317.0
593.150	3371.2	-76.4	-8976.0	123717.0	3750768.0	-4137.0
593.151	3710.9	-30.7	-7515.8	188370.0	4360899.0	-3115.0
593.152	629.6	169.1	7561.7	-44468.0	-1745365.0	3948.0
593.153	969.0	327.4	9029.2	144182.0	-1135310.0	4969.0
593.154	3688.5	1652.8	-6747.6	1916000.0	3384219.0	-5517.0
593.155	4028.1	1705.4	-5297.0	1988000.0	3994325.0	-4496.0
593.156	-2.4	-1863.0	14055.7	-2398000.0	-1802609.0	6785.0
593.157	336.9	-1704.3	15523.5	-2209000.0	-1193579.0	7806.0
593.158	3684.2	556.0	-15888.9	987484.0	4271129.0	-5590.0
593.159	4024.0	601.1	-14429.0	1052000.0	4881285.0	-4568.0
593.160	327.3	-559.9	14533.3	-1012000.0	-2251013.0	5378.0
593.161	666.6	-401.2	16001.1	-822430.9	-1641984.0	6399.0
593.162	4018.9	1346.9	-15325.1	1830000.0	3831992.0	-7015.0
593.163	4358.7	1392.0	-13865.1	1895000.0	4442149.0	-5994.0
593.164	9.9	-2626.7	13219.7	-3196000.0	-1834490.0	6754.0
593.165	349.6	-2500.7	14684.2	-3042000.0	-1224359.0	7774.0
593.166	3693.3	91.8	-16723.0	517793.0	4235437.0	-5612.0
593.167	4033.1	136.7	-15263.2	581585.0	4845593.0	-4591.0
593.168	315.1	173.4	15371.3	-247667.0	-2220107.0	5409.0
593.169	654.4	332.1	16839.1	-58591.0	-1610077.0	6430.0
593.170	4010.7	1806.6	-14493.3	2296000.0	3868913.0	-6995.0
593.171	4350.2	1854.5	-13032.5	2363000.0	4477994.0	-5973.0
593.268	976.8	-991.5	-484.0	-1143000.0	-256040.4	831.0
593.269	2110.0	-583.8	4379.4	-643017.0	1778990.0	4230.0
593.270	1890.7	-121.7	-4809.7	-95527.0	1276831.0	-1998.0
593.271	3022.8	118.8	69.5	217790.0	3308431.0	1409.0
593.272	1307.8	273.7	-16.3	204526.0	-702407.3	-580.0
593.273	2441.8	690.3	4911.1	716072.0	1334203.0	2815.0
593.274	2225.5	739.9	-4250.6	824922.0	837342.5	-3422.0
593.275	3358.2	967.5	598.0	1118000.0	2870472.0	-18.0
593.276	883.2	-1003.3	1855.5	-1218000.0	-397366.7	1267.0
593.277	2016.0	-593.4	6737.6	-714471.0	1637157.0	4667.0
593.278	1987.6	-97.4	-7134.2	-5998.0	1422574.0	-2441.0
593.279	3119.6	163.1	-2271.6	328942.0	3453975.0	966.0
593.280	1213.4	274.9	2326.1	143487.0	-844342.5	-142.0
593.281	2346.7	688.3	7256.7	648753.0	1190657.0	3255.0
593.282	2322.1	789.3	-6571.3	942376.0	982641.5	-3865.0
593.283	3453.4	997.9	-1705.8	1217000.0	3013610.0	-457.0
593.284	988.5	-1725.8	-1313.5	-1910000.0	-288091.8	802.0
593.285	2122.0	-1320.0	3552.2	-1411000.0	1747033.0	4200.0
593.286	1902.0	-848.3	-5644.3	-853029.0	1244335.0	-2027.0
593.287	3033.6	-503.1	-800.9	-424621.0	3276169.0	1381.0
593.288	1297.5	852.6	815.0	799727.0	-667996.9	-554.0
593.289	2432.5	1157.3	5746.5	1188000.0	1369703.0	2839.0

593.290	2217.0	1193.2	-3438.1	1281000.0	873975.4	-3401.0
593.291	3349.7	1442.7	1432.8	1598000.0	2907317.0	4.3
593.292	894.2	-1736.1	1026.2	-1983000.0	-430374.6	1240.0
593.293	2027.9	-1329.8	5905.7	-1484000.0	1605174.0	4638.0
593.294	1998.7	-826.2	-7965.2	-767168.0	1389704.0	-2469.0
593.295	3130.5	-480.7	-3116.7	-334980.0	3420738.0	939.0
593.296	1203.4	837.8	3156.0	721235.0	-809877.9	-116.0
593.297	2337.8	1152.8	8091.5	1119000.0	1226845.0	3277.0
593.298	2313.2	1240.3	-5738.0	1397000.0	1018565.0	-3842.0
593.299	3444.4	1469.4	-878.6	1692000.0	3049328.0	-435.0
963.1	1287.4	-8.2	-46.2	-38568.0	74498.3	-1045.0
963.2	1996.1	-7.0	-78.9	-40471.0	459886.1	-485.0
963.3	1901.2	-31.3	-18.4	-92917.0	1204379.0	-2835.0
963.4	2609.8	-28.8	-47.5	-93439.0	1589714.0	-2274.0
963.5	989.1	-6.3	-36.2	-29577.0	55267.3	-802.0
963.6	1697.7	-5.3	-68.2	-31740.0	440626.8	-242.0
963.7	1602.8	-29.2	-8.8	-83742.0	1185119.0	-2592.0
963.8	2311.4	-27.1	-34.0	-84702.0	1570440.0	-2031.0
963.9	2704.7	-7.5	-104.6	-44169.0	845206.8	76.0
963.10	1717.1	-24.4	-25.9	-76618.0	865441.7	-2298.0
963.11	3134.3	-22.8	-79.7	-81407.0	1636061.0	-1177.0
963.12	2406.3	-6.0	-91.7	-35666.0	825939.4	319.0
963.13	1418.7	-22.3	-16.4	-67491.0	846180.4	-2055.0
963.14	2835.9	-21.4	-66.7	-72983.0	1616797.0	-934.0
963.15	2425.7	-22.7	-61.7	-77997.0	1250771.0	-1737.0
963.16	2127.3	-20.7	-45.8	-68949.0	1231502.0	-1495.0
963.17	969.0	-10.0	-28.5	-39040.0	-98935.1	-1299.0
963.18	1677.7	-7.4	-64.5	-39424.0	286477.8	-739.0
963.19	1582.8	-32.7	-3.7	-92947.0	1030969.0	-3089.0
963.20	2291.4	-29.5	-33.8	-92769.0	1416315.0	-2528.0
963.21	670.6	-8.0	-18.0	-29965.0	-118190.4	-1056.0
963.22	1379.3	-5.6	-54.0	-30651.0	267219.5	-496.0
963.23	1284.4	-31.1	7.4	-84394.0	1011702.0	-2846.0
963.24	1993.0	-27.5	-23.2	-83724.0	1397051.0	-2285.0
963.25	2386.3	-7.6	-94.3	-42828.0	671810.4	-178.0
963.26	1398.7	-26.1	-10.2	-77074.0	692025.4	-2552.0
963.27	2815.9	-22.8	-69.7	-79975.0	1462674.0	-1431.0
963.28	2087.9	-5.8	-80.9	-34097.0	652544.1	65.0
963.29	1100.3	-23.8	-1.3	-67647.0	672767.1	-2309.0
963.30	2517.5	-21.2	-55.9	-71318.0	1443403.0	-1188.0
963.31	756.8	-10.9	-17.0	-39058.0	-214536.4	-1468.0
963.32	1465.4	-7.7	-53.9	-38837.0	170858.2	-908.0
963.33	1186.4	-26.8	-0.4	-76898.0	576411.8	-2721.0
963.34	1895.1	-23.9	-33.7	-76945.0	961788.6	-2161.0
963.35	458.4	-9.5	-6.7	-30613.0	-233795.7	-1226.0
963.36	1167.0	-5.9	-43.9	-29983.0	151601.8	-665.0
963.37	888.0	-24.3	8.0	-67224.0	557155.4	-2478.0
963.38	1596.7	-21.7	-22.7	-67656.0	942525.3	-1918.0
963.39	2107.3	-23.3	-46.3	-77198.0	1077373.0	-1991.0
963.40	1808.9	-21.0	-34.3	-67827.0	1058113.0	-1749.0
963.41	1414.8	-7.7	-53.7	-38567.0	143878.5	-944.0
963.42	2123.4	-6.9	-84.4	-40931.0	529233.1	-383.0
963.43	2028.5	-30.3	-24.5	-92417.0	1273731.0	-2733.0
963.44	2737.1	-28.7	-51.4	-93935.0	1659051.0	-2173.0
963.45	1116.4	-5.8	-44.3	-29638.0	124622.2	-701.0
963.46	1825.0	-5.3	-74.0	-32293.0	509972.8	-140.0
963.47	1730.1	-28.6	-14.3	-83694.0	1254466.0	-2490.0
963.48	2438.7	-27.1	-38.7	-85244.0	1639332.0	-1930.0
963.49	2832.0	-7.6	-109.3	-44881.0	914553.6	177.0
963.50	1844.4	-23.8	-32.8	-76566.0	934791.6	-2196.0



963.51	3261.6	-22.9	-83.5	-82032.0	1705404.0	-1075.0
963.52	2533.6	-5.9	-96.6	-36177.0	895285.3	420.0
963.53	1546.0	-21.6	-22.4	-67337.0	915528.3	-1953.0
963.54	2963.2	-21.5	-71.2	-73612.0	1686141.0	-832.0
963.55	2553.0	-22.6	-65.9	-78471.0	1320110.0	-1636.0
963.56	2254.6	-20.6	-49.8	-69459.0	1300841.0	-1393.0
963.57	1499.7	-7.4	-58.8	-38607.0	190122.9	-876.0
963.58	2208.3	-6.9	-88.6	-41331.0	575472.4	-315.0
963.59	1929.3	-23.5	-38.0	-76658.0	981030.9	-2129.0
963.60	2637.9	-22.5	-68.4	-78787.0	1366344.0	-1568.0
963.61	1201.3	-5.5	-49.3	-29696.0	170866.6	-633.0
963.62	1909.9	-5.5	-79.1	-32869.0	556209.2	-73.0
963.63	1630.9	-21.2	-26.5	-67291.0	961768.6	-1886.0
963.64	2339.5	-20.6	-52.5	-69806.0	1347075.0	-1325.0
963.108	312.6	-2010.5	1761.2	-2176000.0	-1239740.0	-1970.0
963.109	713.5	-2009.3	2069.1	-2185000.0	-507615.1	-3606.0
963.110	1276.1	-1623.3	-2486.0	-1748000.0	493978.2	-4459.0
963.111	1675.9	-1613.5	-2505.2	-1744000.0	1224489.0	-6093.0
963.112	795.8	1211.1	-11134.6	1226000.0	-204203.9	3057.0
963.113	1197.2	1205.8	-10865.5	1209000.0	528979.1	1421.0
963.114	1758.7	1122.2	-10858.4	1158000.0	1529918.0	577.0
963.115	2159.2	1110.7	-10726.5	1133000.0	2261465.0	-1059.0
963.116	403.0	-1908.2	1333.5	-2063000.0	-1083819.0	-2146.0
963.117	804.9	-1906.1	1658.7	-2071000.0	-350480.6	-3785.0
963.118	1185.5	-1739.9	-2027.6	-1878000.0	338571.5	-4280.0
963.119	1585.7	-1729.0	-2046.4	-1873000.0	1069612.0	-5915.0
963.120	886.2	1303.8	-11563.5	1328000.0	-48658.0	2881.0
963.121	1287.6	1298.2	-11298.3	1310000.0	684403.9	1243.0
963.122	1665.4	1025.4	-10238.9	1052000.0	1369828.0	761.0
963.123	2065.9	1016.5	-10179.5	1030000.0	2100809.0	-876.0
963.124	234.7	-4126.3	1699.8	-4385000.0	-267178.8	-1862.0
963.125	635.7	-4123.4	1982.0	-4391000.0	465088.7	-3499.0
963.126	1198.5	-3777.1	-3252.3	-3990000.0	1466880.0	-4354.0
963.127	1599.5	-3763.1	-3247.8	-3983000.0	2199553.0	-5991.0
963.128	871.5	2635.4	-22013.9	2676000.0	-1178031.0	2970.0
963.129	1273.2	2621.1	-21782.3	2648000.0	-444369.1	1331.0
963.130	1835.5	2585.1	-21435.1	2644000.0	558302.1	485.0
963.131	2236.2	2571.6	-21247.7	2615000.0	1290081.0	-1152.0
963.132	326.4	-4019.4	1276.5	-4268000.0	-110006.3	-2044.0
963.133	728.0	-4015.1	1556.5	-4273000.0	623358.4	-3682.0
963.134	1107.9	-3892.1	-2793.1	-4118000.0	1310908.0	-4175.0
963.135	1508.1	-3879.2	-2789.3	-4111000.0	2042379.0	-5810.0
963.136	965.2	2735.4	-22547.4	2784000.0	-1017274.0	2783.0
963.137	1365.9	2720.6	-22284.0	2756000.0	-285405.1	1147.0
963.138	1742.8	2486.6	-20781.5	2535000.0	398974.9	668.0
963.139	2143.0	2475.5	-20659.7	2511000.0	1129984.0	-967.0
963.140	-643.6	-1090.2	6324.1	-1223000.0	-2902185.0	2691.0
963.141	-242.2	-1047.8	6277.1	-1188000.0	-2169410.0	1053.0
963.142	2578.4	-421.8	-8513.9	-451145.0	2896753.0	-5623.0
963.143	2978.3	-458.3	-8633.2	-500114.0	3627148.0	-7258.0
963.144	-495.6	-12.5	-2089.6	-87225.0	-2586660.0	4188.0
963.145	-94.2	30.9	-2130.7	-51309.0	-1853884.0	2550.0
963.146	2721.5	278.7	-8971.8	289531.0	3205036.0	-4107.0
963.147	3121.4	242.2	-9091.2	240543.0	3935431.0	-5741.0
963.148	-667.5	-1736.9	7030.7	-1898000.0	-2611245.0	2724.0
963.149	-266.6	-1737.1	7358.5	-1908000.0	-1878597.0	1088.0
963.150	2556.8	-856.4	-8310.2	-895745.0	3190277.0	-5600.0
963.151	2956.5	-895.1	-8445.0	-946926.0	3920621.0	-7234.0
963.152	-471.6	608.9	-6601.7	557440.0	-2877574.0	4155.0
963.153	-69.8	654.7	-6612.8	595672.0	-2143698.0	2516.0

963.154	2743.8	723.3	-9140.2	744385.0	2911691.0	-4133.0
963.155	3143.8	695.4	-9278.1	704591.0	3642111.0	-5767.0
963.156	-343.4	-749.0	4464.2	-845690.1	-2385069.0	2107.0
963.157	58.5	-702.3	4467.0	-806524.0	-1651167.0	467.0
963.158	2268.6	-761.6	-6773.6	-826247.0	2365204.0	-5008.0
963.159	2668.2	-801.2	-6913.6	-878278.0	3095522.0	-6641.0
963.160	-194.9	328.6	-3861.7	289725.0	-2069417.0	3602.0
963.161	207.0	375.4	-3858.8	328898.0	-1335515.0	1962.0
963.162	2411.8	-52.3	-7238.9	-76040.0	2673512.0	-3491.0
963.163	2811.4	-91.9	-7378.9	-128124.0	3403831.0	-5125.0
963.164	-367.9	-1410.9	5512.8	-1536000.0	-2095281.0	2142.0
963.165	33.5	-1405.4	5865.0	-1541000.0	-1362506.0	504.0
963.166	2246.3	-1208.1	-6600.0	-1283000.0	2658550.0	-4982.0
963.167	2646.1	-1247.3	-6740.6	-1335000.0	3388919.0	-6616.0
963.168	-169.8	955.5	-8233.2	939549.0	-2358053.0	3565.0
963.169	232.1	1002.3	-8230.3	978722.0	-1624151.0	1925.0
963.170	2433.0	382.9	-7467.6	369481.0	2378887.0	-3513.0
963.171	2832.9	347.5	-7590.5	321635.0	3110282.0	-5148.0
963.268	12.1	-731.2	1556.7	-804540.0	-1734932.0	1701.0
963.269	1349.3	-729.9	2643.2	-837709.9	706828.0	-3756.0
963.270	980.4	-391.1	-2321.8	-425165.0	6672.4	-800.0
963.271	2313.1	-459.3	-2685.4	-529698.0	2441487.0	-6247.0
963.272	158.1	303.5	-3483.8	288946.0	-1422914.0	3205.0
963.273	1496.5	378.4	-2994.7	333187.0	1021047.0	-2255.0
963.274	1123.5	347.2	-3236.2	356863.0	314965.4	717.0
963.275	2457.2	311.9	-3259.3	285090.0	2751023.0	-4732.0
963.276	101.7	-635.7	1082.7	-698289.0	-1581214.0	1528.0
963.277	1440.7	-624.7	2228.5	-721828.0	864115.5	-3935.0
963.278	887.0	-516.3	-1838.9	-562678.0	-153243.2	-613.0
963.279	2221.5	-559.6	-2178.1	-640407.0	2284261.0	-6065.0
963.280	248.6	407.4	-3974.7	403471.0	-1266968.0	3028.0
963.281	1586.8	472.5	-3459.0	436861.0	1176304.0	-2432.0
963.282	1030.2	249.9	-2598.0	249567.0	155194.2	903.0
963.283	2363.8	206.9	-2735.4	170396.0	2591342.0	-4547.0
963.284	-11.3	-1365.7	1547.0	-1467000.0	-1443865.0	1733.0
963.285	1326.0	-1364.1	2627.7	-1500000.0	998632.3	-3724.0
963.286	956.3	-1031.9	-2438.1	-1093000.0	297079.8	-766.0
963.287	2289.9	-1017.2	-2692.2	-1106000.0	2733604.0	-6216.0
963.288	181.8	814.3	-7206.7	813881.0	-1713905.0	3174.0
963.289	1519.4	804.1	-6277.8	766082.0	729118.9	-2283.0
963.290	1146.2	769.8	-6227.6	786274.0	22888.0	690.0
963.291	2480.2	754.4	-6456.0	734633.0	2459855.0	-4760.0
963.292	79.1	-1263.8	1116.9	-1355000.0	-1287944.0	1557.0
963.293	1417.0	-1259.7	2203.6	-1385000.0	1155228.0	-3902.0
963.294	863.6	-1156.8	-1987.7	-1231000.0	138211.8	-582.0
963.295	2198.3	-1134.5	-2202.8	-1235000.0	2576379.0	-6035.0
963.296	272.2	906.1	-7639.5	915448.1	-1557984.0	2997.0
963.297	1609.8	896.9	-6744.0	868278.0	884612.8	-2459.0
963.298	1052.9	668.2	-5524.0	674318.0	-137029.2	876.0
963.299	2387.4	658.8	-5856.7	629957.0	2300325.0	-4576.0

### Calcolo resistenze

Resistenza a trazione dei bulloni

$$F_{tb,Rd} = 0.9 \cdot f_{tb} \cdot A_{res} / \gamma_{M2} = 141145.5 \text{ N}$$

Resistenza a punzonamento flangia

$$B_{pf,Rd} = 0.6 \cdot \pi \cdot d_m \cdot t_f \cdot f_{tk} / \gamma_{M2} = 576796.4 \text{ N}$$

Bull.	$F_{f,Rd} \text{ [N]}$	$F_{t,Rd} \text{ [N]}$
1	166812.2	141145.5
2	97243.2	97243.2
3	97243.2	97243.2
4	166812.2	141145.5
5	166812.2	141145.5

6	97243.2	97243.2
7	97243.2	97243.2
8	166812.2	141145.5

#### Legenda

$F_{f,Rd} = M_{res,m} / (B_m \cdot R_m)$  resistenza a flessione flangia

$F_{t,Rd} = \min [ F_{tb,Rd} , B_{pf,Rd} , F_{f,Rd} ]$  resistenza a trazione di progetto

Resistenza a taglio dei bulloni

$$F_{vb,Rd} = 0.6 \cdot f_{tb} \cdot A_{res} / \gamma_{M2} =$$

94097.0 N

Bull.	$F_{bf,x,Rd}$ [N]	$F_{v,x,Rd}$ [N]	$F_{bf,y,Rd}$ [N]	$F_{v,y,Rd}$ [N]
1	242857.1	94097.0	362699.0	94097.0
2	158666.7	94097.0	255081.0	94097.0
3	158666.7	94097.0	255081.0	94097.0
4	242857.1	94097.0	362699.0	94097.0
5	242857.1	94097.0	362699.0	94097.0
6	158666.7	94097.0	255081.0	94097.0
7	158666.7	94097.0	255081.0	94097.0
8	242857.1	94097.0	362699.0	94097.0

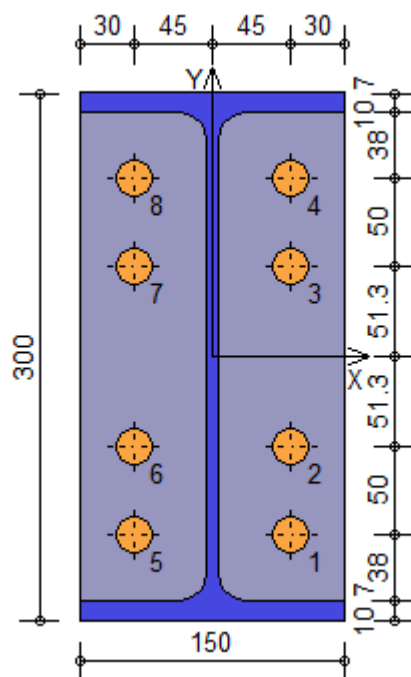
#### Legenda

$F_{bf,x,Rd} = k \cdot \alpha \cdot f_{tk} \cdot \varnothing \cdot t_f / \gamma_{M2}$  resistenza a rifollamento flangia in direzione x

$F_{v,x,Rd} = \min [ F_{vb,Rd} , F_{bf,x,Rd} ]$  resistenza a taglio di progetto in direzione x

$F_{bf,y,Rd} = k \cdot \alpha \cdot f_{tk} \cdot \varnothing \cdot t_f / \gamma_{M2}$  resistenza a rifollamento flangia in direzione y

$F_{v,y,Rd} = \min [ F_{vb,Rd} , F_{bf,y,Rd} ]$  resistenza a taglio di progetto in direzione y



#### Verifiche sui bulloni

##### 1-Taglio e trazione (Nodo n. 200, CMB n. 51)

Bull.	X [mm]	Y [mm]	$F_{v,Ed}$ [N]	$F_{v,Rd}$ [N]	$F_{t,Ed}$ [N]	$F_{t,Rd}$ [N]	FV <sub>1</sub>	VER
1	45.00	-101.30	7089.6	94097.0	115552.8	141145.5	0.660114	Ok
2	45.00	-51.30	7089.6	94097.0	86503.1	97243.2	0.710739	Ok
3	45.00	51.30	7089.6	94097.0	26893.0	97243.2	0.272882	Ok
4	45.00	101.30	7089.6	94097.0	0.0	141145.5	0.075344	Ok
5	-45.00	-101.30	7070.5	94097.0	115491.1	141145.5	0.659599	Ok
6	-45.00	-51.30	7070.5	94097.0	86441.4	97243.2	0.710083	Ok
7	-45.00	51.30	7070.5	94097.0	26831.3	97243.2	0.272226	Ok
8	-45.00	101.30	7070.5	94097.0	0.0	141145.5	0.075141	Ok

##### 2-Trazione (Nodo n. 200, CMB n. 51)

Bull.	X [mm]	Y [mm]	$F_{t,Ed}$ [N]	$F_{t,Rd}$ [N]	FV <sub>2</sub>	VER
1	45.00	-101.30	115552.8	141145.5	0.818679	Ok

2	45.00	-51.30	86503.1	97243.2	0.889554	Ok
3	45.00	51.30	26893.0	97243.2	0.276554	Ok
4	45.00	101.30	0.0	141145.5	0.000000	Ok
5	-45.00	-101.30	115491.1	141145.5	0.818242	Ok
6	-45.00	-51.30	86441.4	97243.2	0.888920	Ok
7	-45.00	51.30	26831.3	97243.2	0.275920	Ok
8	-45.00	101.30	0.0	141145.5	0.000000	Ok

#### Legenda

$F_{v,Ed}$  forza di taglio agente sul bullone  
 $F_{v,Rd}$  resistenza a taglio di progetto del bullone  
 $F_{t,Ed}$  forza di trazione agente sul bullone  
 $F_{t,Rd}$  resistenza a trazione di progetto del bullone  
 $FV_1 = F_{v,Ed} / F_{v,Rd} + F_{t,Ed} / (1.4 \cdot F_{t,Rd})$   
 $FV_2 = F_{t,Ed} / F_{t,Rd}$   
 $VER \rightarrow FV_i \leq 1$

#### Verifiche sulle saldature profilo-flangia (versione beta)

Si considera la sezione di gola (avente altezza  $a = s_c / 2^{0.5} = 9.192$ ) in posizione ribaltata: vengono considerate positive le tensioni normali di trazione e le tensioni tangenziali agenti verso destra e verso il basso. Tutte le tensioni sono espresse in N/mm<sup>2</sup>.

Verifica formula (4.2.84) (Nodo n. 196, CMB n. 51)

Cordoni	$n_{\perp}$	$t_{\perp}$	$\tau_{\parallel}$	$FV_1$	$VER_1$
Ala inferiore interno lato destro	202.18	0.00	0.02	202.18	Ok
Ala inferiore interno lato sinistro	203.36	0.00	0.02	203.36	Ok
Anima lato destro	-194.69	0.00	-12.38	195.08	Ok
Anima lato sinistro	-194.69	0.00	-12.38	195.08	Ok
Ala superiore interno lato destro	-211.59	0.00	0.02	211.59	Ok
Ala superiore interno lato sinistro	-210.41	0.00	0.02	210.41	Ok

Verifica formula (4.2.85) (Nodo n. 196, CMB n. 51)

Cordoni	$n_{\perp}$	$t_{\perp}$	$\tau_{\parallel}$	$FV_2$	$VER_2$
Ala inferiore interno lato destro	202.18	0.00	0.02	202.18	Ok
Ala inferiore interno lato sinistro	203.36	0.00	0.02	203.36	Ok
Anima lato destro	-194.69	0.00	-12.38	194.69	Ok
Anima lato sinistro	-194.69	0.00	-12.38	194.69	Ok
Ala superiore interno lato destro	-211.59	0.00	0.02	211.59	Ok
Ala superiore interno lato sinistro	-210.41	0.00	0.02	210.41	Ok

#### Legenda

$n_{\perp}$  tensione normale perpendicolare all'asse del cordone  
 $t_{\perp}$  tensione tangenziale perpendicolare all'asse del cordone  
 $\tau_{\parallel}$  tensione tangenziale parallela all'asse del cordone  
 $FV_1 = (n_{\perp}^2 + t_{\perp}^2 + \tau_{\parallel}^2)^{0.5}$   
 $FV_2 = |n_{\perp}| + |t_{\perp}|$   
 $VER_i \rightarrow FV_i \leq \beta_i \cdot f_{yk} \quad (\beta_1 \cdot f_{yk} = 248.50 \text{ N/mm}^2 \quad \beta_2 \cdot f_{yk} = 301.75 \text{ N/mm}^2)$

#### Verifica del momento di progetto del giunto (Nodo n. 200, CMB n. 51)

Momento resistente del giunto  $M_{j,Rd} = 117546300.0 \text{ N mm}$   
 Momento di progetto  $M_{j,Ed} = 90309540.0 \text{ N mm}$   
 $M_{j,Ed} / M_{j,Rd} = 0.768289 \text{ Ok}$

#### Trave lato 3-

Tipo di profilo: IPE 300

Materiale: Acciaio S355  $f_y = 355 \text{ N/mm}^2$   $f_t = 510 \text{ N/mm}^2$   $\gamma_{ov} = 1.25$

Classe sezione: 1

#### Flangia:

Materiale: Acciaio S355  $f_y = 355 \text{ N/mm}^2$   $f_t = 510 \text{ N/mm}^2$   $\gamma_{ov} = 1.25$

Dimensioni (B x H x Sp): 150.0 x 300.0 x 25.0 mm

#### Bullonature:

Viti cl. 8.8 Dadi 8 o 10 (  $f_{yb} = 640 \text{ N/mm}^2$ ,  $f_{tb} = 800 \text{ N/mm}^2$  )  
 Diametro gambo  $\varnothing = 20 \text{ mm}$   $A_{res} = 245.0 \text{ mm}^2$  (ridotta per filettatura)  
 Diametro dado/testa  $d_m = 30 \text{ mm}$   
 Diametro foro  $\varnothing_0 = 21 \text{ mm}$

Saldature:

Materiale: Acciaio S355  $f_y = 355 \text{ N/mm}^2$   $f_t = 510 \text{ N/mm}^2$   $\beta_1 = 0.70$   $\beta_2 = 0.85$   
 Spessore cordoni d'angolo  $s_c = 13 \text{ mm}$

Sollecitazioni nella sezione d'attacco dell'elemento:

Nodo.CMB	V2 [N]	V3 [N]	N [N]	M2 [N mm]	M3 [N mm]	T [N mm]
108.1	544.7	-15.7	-164.4	-29410.0	-94868.3	-5678.0
108.2	336.6	-26.8	-213.3	-24066.0	135061.9	-12487.0
108.3	-134.6	-14.6	-254.3	-72344.0	677115.2	-3657.0
108.4	-342.7	-26.1	-297.6	-66426.0	907063.4	-10465.0
108.5	420.2	-12.2	-126.2	-22523.0	-74350.3	-4370.0
108.6	212.1	-23.2	-175.3	-17305.0	155585.0	-11178.0
108.7	-259.1	-11.3	-215.9	-65288.0	697638.2	-2349.0
108.8	-467.3	-22.3	-258.8	-59721.0	927516.1	-9157.0
108.9	128.5	-36.6	-258.9	-19843.0	365049.2	-19295.0
108.10	69.2	-14.7	-227.4	-59612.0	445505.7	-4264.0
108.11	-347.1	-35.7	-316.4	-49702.0	905451.8	-17880.0
108.12	4.0	-32.6	-218.8	-13318.0	385581.2	-17986.0
108.13	-55.3	-11.4	-188.9	-52556.0	466028.7	-2955.0
108.14	-471.6	-31.9	-276.2	-43091.0	926425.8	-16571.0
108.15	-138.9	-26.0	-272.0	-53963.0	675460.9	-11072.0
108.16	-263.4	-22.5	-233.6	-47079.0	695995.9	-9763.0
108.17	638.4	-9.9	-141.5	-32570.0	-198414.7	-2616.0
108.18	430.4	-21.9	-190.5	-26365.0	31504.9	-9424.0
108.19	-40.9	-9.1	-233.1	-75253.0	573544.8	-595.0
108.20	-249.0	-21.2	-277.5	-68769.0	803475.1	-7403.0
108.21	513.9	-6.3	-102.8	-25653.0	-177898.7	-1307.0
108.22	305.9	-18.3	-152.7	-19578.0	52027.0	-8115.0
108.23	-165.4	-5.3	-193.8	-68569.0	594072.9	714.0
108.24	-373.5	-17.8	-238.5	-61812.0	824001.1	-6094.0
108.25	222.3	-32.1	-238.4	-21838.0	261474.2	-16232.0
108.26	162.9	-8.9	-206.6	-62786.0	341941.3	-1201.0
108.27	-253.3	-31.3	-296.1	-51646.0	801870.8	-14817.0
108.28	97.7	-28.3	-199.6	-15171.0	281980.8	-14923.0
108.29	38.4	-5.7	-168.5	-55608.0	362461.3	108.0
108.30	-377.8	-27.6	-256.8	-44968.0	822406.8	-13509.0
108.31	700.9	-6.1	-125.5	-34535.0	-267442.8	-574.0
108.32	492.8	-18.5	-175.3	-27974.0	-37560.6	-7382.0
108.33	225.4	-5.2	-193.0	-64724.0	272900.2	841.0
108.34	17.3	-17.6	-237.5	-58092.0	502827.4	-5967.0
108.35	576.4	-2.3	-86.5	-27900.0	-246921.8	735.0
108.36	368.4	-14.9	-137.3	-21144.0	-17016.2	-6074.0
108.37	100.9	-2.1	-155.0	-57438.0	293418.2	2149.0
108.38	-107.2	-14.3	-199.6	-51016.0	523352.4	-4659.0
108.39	-45.2	-21.1	-251.0	-56336.0	571872.6	-8009.0
108.40	-169.7	-17.8	-212.8	-49224.0	592394.6	-6701.0
108.41	507.2	-17.8	-173.1	-28288.0	-53451.4	-6903.0
108.42	299.1	-28.7	-222.2	-23170.0	176490.8	-13712.0
108.43	-172.1	-17.0	-262.6	-70973.0	718536.1	-4882.0
108.44	-380.2	-27.9	-305.8	-65613.0	948600.3	-11690.0
108.45	382.7	-14.3	-135.0	-21423.0	-32933.4	-5595.0
108.46	174.6	-25.0	-183.9	-16467.0	197014.8	-12403.0
108.47	-296.6	-13.5	-223.9	-64120.0	739063.1	-3574.0
108.48	-504.7	-24.1	-266.9	-58901.0	969033.3	-10382.0
108.49	91.0	-38.3	-266.6	-19087.0	406480.1	-20520.0



108.50	31.7	-16.9	-235.7	-58419.0	486928.6	-5489.0
108.51	-384.6	-37.5	-324.1	-48925.0	946484.7	-19105.0
108.52	-33.5	-34.4	-226.6	-12490.0	427014.1	-19211.0
108.53	-92.8	-13.6	-197.8	-51357.0	507453.6	-4180.0
108.54	-509.1	-33.7	-283.7	-42325.0	966917.7	-17796.0
108.55	-176.4	-27.9	-280.4	-53110.0	716898.8	-12297.0
108.56	-300.9	-24.3	-241.7	-46255.0	737433.8	-10988.0
108.57	482.2	-19.2	-178.9	-27571.0	-25840.2	-7720.0
108.58	274.1	-30.0	-228.0	-22624.0	204111.1	-14528.0
108.59	6.7	-18.3	-241.2	-57695.0	514545.8	-6305.0
108.60	-201.4	-29.1	-286.0	-52566.0	744525.0	-13114.0
108.61	357.8	-15.7	-140.8	-20713.0	-5295.8	-6412.0
108.62	149.6	-26.1	-189.4	-16034.0	224639.1	-13220.0
108.63	-117.8	-15.1	-203.3	-50579.0	535069.8	-4997.0
108.64	-325.9	-25.5	-247.2	-45705.0	765058.1	-11805.0
108.108	353.4	-471.6	-3069.3	-13090.0	1428.6	-7191.0
108.109	-72.8	-607.1	-3290.0	-55958.0	484389.6	-8635.0
108.110	-523.3	400.3	-1675.0	-310663.0	996317.3	-4958.0
108.111	-949.1	239.9	-1980.2	-335124.0	1478356.0	-6401.0
108.112	1235.2	2.9	838.5	-21090.0	-997815.1	-687.0
108.113	808.2	-117.1	383.4	-82048.0	-513622.9	-2129.0
108.114	351.9	891.9	-1323.2	-447698.0	4736.2	1571.0
108.115	-73.6	805.3	-1886.3	-533544.0	486943.7	125.0
108.116	447.9	-318.4	-2842.5	-111908.0	-105704.9	-7577.0
108.117	21.6	-451.4	-3047.3	-156339.0	377332.7	-9022.0
108.118	-620.8	257.6	-2004.4	-224189.0	1106596.0	-4563.0
108.119	-1046.7	97.4	-2304.1	-248555.0	1589609.0	-6006.0
108.120	1329.6	156.5	1002.7	-120616.0	-1104880.0	-1072.0
108.121	903.4	43.8	528.0	-186783.0	-621602.9	-2517.0
108.122	258.0	740.9	-1348.8	-349282.0	111273.9	1958.0
108.123	-167.4	647.2	-1912.1	-429627.0	593221.8	513.0
108.124	1107.9	-615.1	-5355.0	-343388.0	-853092.0	-7008.0
108.125	682.2	-753.0	-5576.8	-384190.0	-370980.2	-8454.0
108.126	233.5	180.4	-4092.7	-597543.0	138742.9	-4784.0
108.127	-192.6	23.7	-4376.3	-623726.0	621620.3	-6228.0
108.128	465.2	464.0	866.6	-82337.0	-125189.5	-814.0
108.129	39.4	383.0	305.3	-172529.0	357347.9	-2260.0
108.130	-417.6	1395.8	-1693.3	-533097.0	876591.5	1441.0
108.131	-843.1	1314.0	-2255.8	-622694.0	1358232.0	-4.8
108.132	1204.6	-456.6	-5100.8	-443912.0	-963573.6	-7404.0
108.133	778.4	-592.9	-5324.3	-485912.0	-480001.7	-8849.0
108.134	136.1	37.3	-4407.8	-510094.0	249235.2	-4388.0
108.135	-289.9	-120.4	-4691.1	-535471.0	731933.8	-5831.0
108.136	560.5	616.7	890.0	-181207.0	-233159.2	-1207.0
108.137	134.8	534.7	328.3	-270241.0	249196.5	-2652.0
108.138	-511.9	1246.9	-1723.5	-437430.0	983207.7	1829.0
108.139	-937.4	1157.5	-2286.4	-521190.0	1465322.0	384.0
108.140	1686.3	-1356.0	-2973.0	408703.0	-1510439.0	-7520.0
108.141	1260.5	-1509.3	-3200.1	383468.0	-1028400.0	-8966.0
108.142	-1248.0	1582.7	-3993.9	-761053.0	1818570.0	-52.0
108.143	-1673.5	1492.7	-4556.7	-845965.1	2301684.0	-1496.0
108.144	1953.5	-1212.8	-1424.8	433866.0	-1812690.0	-5582.0
108.145	1527.6	-1366.7	-1652.0	409152.0	-1330677.0	-7028.0
108.146	-986.2	1758.2	-4138.9	-852521.0	1522949.0	1913.0
108.147	-1411.8	1668.1	-4701.8	-937361.1	2005038.0	469.0
108.148	1913.3	-1396.9	-3658.0	307099.0	-1767883.0	-7467.0
108.149	1487.1	-1530.8	-3886.1	262623.0	-1284946.0	-8911.0
108.150	-1017.1	1467.8	-3898.2	-759699.0	1557114.0	-15.0
108.151	-1442.9	1373.2	-4456.9	-841888.0	2040153.0	-1458.0
108.152	1725.8	-1149.9	-651.2	516510.0	-1555424.0	-5634.0

108.153	1300.2	-1297.6	-894.9	487726.0	-1073334.0	-7081.0
108.154	-1216.4	1883.5	-4246.2	-859251.0	1783582.0	1872.0
108.155	-1642.1	1788.1	-4809.5	-939650.0	2265646.0	429.0
108.156	2000.2	-880.4	-2148.4	106761.0	-1865849.0	-8800.0
108.157	1574.8	-1025.5	-2398.8	76328.0	-1384710.0	-10248.0
108.158	-1569.1	1103.4	-4114.5	-453555.0	2183155.0	1266.0
108.159	-1995.0	1007.2	-4671.8	-534747.0	2666168.0	-176.0
108.160	2267.6	-733.6	-600.0	132127.0	-2169050.0	-6864.0
108.161	1842.2	-878.6	-850.3	101698.0	-1686910.0	-8312.0
108.162	-1307.2	1282.8	-4262.2	-549408.0	1886559.0	3230.0
108.163	-1733.1	1186.6	-4819.4	-630586.0	2368573.0	1787.0
108.164	2226.8	-919.3	-2838.2	-687.0	-2123395.0	-8744.0
108.165	1801.0	-1045.3	-3089.5	-49871.0	-1640357.0	-10190.0
108.166	-1338.9	974.9	-4007.5	-442582.0	1922522.0	1306.0
108.167	-1764.8	878.8	-4564.8	-523859.0	2404535.0	-136.0
108.168	2040.9	-653.8	136.7	205895.0	-1912530.0	-6920.0
108.169	1615.4	-798.9	-113.6	175466.0	-1430415.0	-8368.0
108.170	-1538.3	1392.9	-4353.2	-548756.0	2147964.0	3194.0
108.171	-1963.8	1302.0	-4915.7	-632904.0	2630079.0	1750.0
108.268	1162.5	-239.0	-1141.0	135749.0	-915248.1	-3238.0
108.269	-257.9	-681.6	-1892.4	-14879.0	694244.5	-8053.0
108.270	284.0	589.9	-360.7	-143084.0	81448.2	-1007.0
108.271	-1134.9	239.8	-2203.3	-376820.0	1689246.0	-5819.0
108.272	1428.6	-112.1	399.5	167337.0	-1216779.0	-1294.0
108.273	7.5	-571.5	-629.7	28966.0	393640.6	-6108.0
108.274	545.8	746.1	-482.6	-208085.0	-215148.4	957.0
108.275	-873.6	397.0	-2360.5	-449387.0	1393499.0	-3854.0
108.276	1256.2	-101.5	-880.4	47014.0	-1021491.0	-3620.0
108.277	-163.8	-524.9	-1665.6	-115505.0	587522.5	-8440.0
108.278	187.2	449.3	-397.5	-58007.0	191280.6	-609.0
108.279	-1231.7	82.0	-2236.7	-274420.0	1798703.0	-5424.0
108.280	1523.1	36.4	636.7	74345.0	-1323818.0	-1680.0
108.281	102.8	-419.9	-441.7	-69074.0	285639.9	-6496.0
108.282	449.4	595.8	-514.6	-112244.0	-105761.6	1353.0
108.283	-968.7	249.0	-2389.8	-354955.0	1501386.0	-3463.0
108.284	1389.6	-281.0	-1817.6	36461.0	-1172667.0	-3186.0
108.285	-31.0	-724.1	-2571.0	-113813.0	437229.0	-8000.0
108.286	511.7	553.5	-414.6	-245989.0	-176460.5	-955.0
108.287	-906.6	133.2	-2127.9	-410630.0	1431132.0	-5771.0
108.288	1199.7	3.2	843.0	186511.0	-957816.0	-1341.0
108.289	-222.6	-423.8	-460.5	3392.0	654308.8	-6150.0
108.290	315.0	899.9	-594.9	-237075.0	46378.3	918.0
108.291	-1104.5	546.6	-2473.0	-473650.0	1654954.0	-3893.0
108.292	1484.1	-127.9	-1597.9	-62525.0	-1279707.0	-3571.0
108.293	63.2	-570.5	-2337.5	-212657.0	330352.4	-8386.0
108.294	415.0	428.3	-646.8	-171789.0	-66868.8	-559.0
108.295	-1003.5	-25.8	-2168.7	-312047.0	1540563.0	-5375.0
108.296	1294.0	154.9	1049.6	88182.0	-1064906.0	-1726.0
108.297	-127.7	-270.9	-284.0	-95583.0	546751.7	-6537.0
108.298	218.9	753.2	-625.8	-143878.0	155267.1	1313.0
108.299	-1199.1	393.3	-2502.7	-374462.0	1761968.0	-3504.0
195.1	-854.2	83.1	-2979.5	-115462.0	-7625582.0	4241.0
195.2	-1320.8	100.0	-3483.8	-143719.0	-11964890.0	3464.0
195.3	-1362.2	155.2	-5352.2	-224844.0	-8444386.0	8729.0
195.4	-1828.8	171.7	-5855.6	-252880.0	-12783690.0	7952.0
195.5	-656.9	63.5	-2292.7	-87998.0	-5862557.0	3262.0
195.6	-1123.5	80.5	-2797.0	-116293.0	-10199860.0	2485.0
195.7	-1164.9	135.5	-4665.2	-197347.0	-6682360.0	7750.0
195.8	-1631.5	152.2	-5168.6	-225438.0	-11023670.0	6973.0
195.9	-1787.5	117.1	-3987.9	-172149.0	-16303220.0	2687.0

195.10	-1209.8	133.6	-4640.7	-192043.0	-8198745.0	7382.0
195.11	-2143.1	167.4	-5648.0	-248586.0	-16873380.0	5829.0
195.12	-1590.1	97.6	-3301.3	-144749.0	-14533170.0	1708.0
195.13	-1012.5	113.9	-3953.7	-164558.0	-6436720.0	6403.0
195.14	-1945.8	147.9	-4961.7	-221223.0	-15113360.0	4850.0
195.15	-1676.4	150.3	-5144.1	-220168.0	-12535050.0	6606.0
195.16	-1479.1	130.7	-4457.2	-192706.0	-10775030.0	5626.0
195.17	-646.3	75.8	-2752.6	-103174.0	-5674870.0	4595.0
195.18	-1112.9	92.4	-3256.6	-131235.0	-10012180.0	3818.0
195.19	-1154.3	147.8	-5125.5	-212524.0	-6493673.0	9083.0
195.20	-1620.9	164.3	-5628.8	-240472.0	-10830980.0	8306.0
195.21	-448.9	56.2	-2065.8	-75707.0	-3911819.0	3616.0
195.22	-915.6	72.9	-2569.8	-103802.0	-8249150.0	2839.0
195.23	-956.9	128.2	-4438.5	-185073.0	-4731622.0	8104.0
195.24	-1423.6	144.6	-4941.8	-212993.0	-9068954.0	7327.0
195.25	-1579.5	109.5	-3760.9	-159660.0	-14350480.0	3042.0
195.26	-1001.9	126.2	-4413.9	-179757.0	-6248032.0	7737.0
195.27	-1935.1	159.7	-5421.0	-236072.0	-14920650.0	6183.0
195.28	-1382.2	90.0	-3074.1	-132227.0	-12590460.0	2062.0
195.29	-804.5	106.6	-3726.9	-152237.0	-4485981.0	6758.0
195.30	-1737.8	140.2	-4734.2	-208656.0	-13160620.0	5204.0
195.31	-507.6	70.9	-2601.5	-94968.0	-4373702.0	4831.0
195.32	-974.3	87.4	-3105.1	-122923.0	-8711034.0	4055.0
195.33	-863.2	121.3	-4262.6	-171518.0	-4946865.0	7973.0
195.34	-1329.9	137.8	-4766.1	-199503.0	-9285196.0	7196.0
195.35	-310.3	51.4	-1915.0	-67576.0	-2611677.0	3852.0
195.36	-776.9	67.8	-2418.3	-95478.0	-6948983.0	3076.0
195.37	-665.9	101.6	-3575.6	-143972.0	-3184839.0	6994.0
195.38	-1132.5	118.2	-4079.0	-171991.0	-7522146.0	6217.0
195.39	-1468.5	142.8	-4917.2	-207738.0	-10582340.0	6960.0
195.40	-1271.2	123.1	-4230.2	-180229.0	-8823312.0	5981.0
195.41	-937.4	86.1	-3070.3	-120395.0	-8405678.0	4099.0
195.42	-1404.0	103.1	-3574.7	-148717.0	-12745980.0	3322.0
195.43	-1445.4	158.1	-5442.8	-229721.0	-9225481.0	8587.0
195.44	-1912.0	174.8	-5946.4	-257873.0	-13564790.0	7810.0
195.45	-740.0	66.5	-2383.5	-92938.0	-6643628.0	3120.0
195.46	-1206.7	83.5	-2887.9	-121302.0	-10975960.0	2343.0
195.47	-1248.0	138.5	-4755.9	-202272.0	-7462431.0	7608.0
195.48	-1714.7	155.2	-5259.5	-230447.0	-11804760.0	6831.0
195.49	-1870.7	120.2	-4078.9	-177177.0	-17084320.0	2545.0
195.50	-1293.0	136.5	-4731.4	-196968.0	-8978840.0	7241.0
195.51	-2226.3	170.4	-5739.0	-253610.0	-17654480.0	5687.0
195.52	-1673.3	100.7	-3392.2	-149753.0	-15314270.0	1566.0
195.53	-1095.6	116.9	-4044.3	-169464.0	-7216789.0	6261.0
195.54	-2028.9	150.9	-5052.6	-226239.0	-15894430.0	4708.0
195.55	-1759.6	153.3	-5234.9	-225161.0	-13316150.0	6464.0
195.56	-1562.3	133.7	-4548.0	-197706.0	-11556120.0	5485.0
195.57	-992.8	88.1	-3130.9	-123686.0	-8925724.0	4004.0
195.58	-1459.5	105.1	-3635.2	-152057.0	-13260060.0	3228.0
195.59	-1348.4	138.5	-4791.9	-200263.0	-9499887.0	7146.0
195.60	-1815.1	155.3	-5295.4	-228489.0	-13840220.0	6369.0
195.61	-795.5	68.5	-2444.0	-96233.0	-7163699.0	3025.0
195.62	-1262.1	85.6	-2948.5	-124652.0	-11500010.0	2248.0
195.63	-1151.1	118.8	-4104.7	-172745.0	-7736862.0	6167.0
195.64	-1617.7	135.8	-4608.5	-201042.0	-12070170.0	5390.0
195.108	-1422.2	40.9	-7900.8	280416.0	-3384599.0	-2628.0
195.109	-1755.7	94.5	-5362.9	199028.0	-4544158.0	-927.0
195.110	-2145.2	244.7	-6489.7	-58530.0	-4693916.0	451.0
195.111	-2479.0	295.7	-8508.9	-133408.0	-5852551.0	2152.0
195.112	754.7	-47.3	-2438.6	-156004.0	-6526646.0	7958.0

195.113	421.3	19.3	-811.1	-252790.0	-7686180.0	9658.0
195.114	33.1	320.6	-10990.1	-659727.0	-7837608.0	11028.0
195.115	-300.8	379.3	-13034.5	-741048.0	-8996268.0	12730.0
195.116	-1304.3	-51.1	-12091.4	407932.0	-3256705.0	-3266.0
195.117	-1637.9	2.0	-9566.0	327636.0	-4416290.0	-1565.0
195.118	-2263.7	330.6	-11593.5	-175362.0	-4822961.0	1087.0
195.119	-2597.6	381.4	-13612.6	-250134.0	-5981622.0	2789.0
195.120	872.6	-138.0	-5922.4	-29516.0	-6398753.0	7320.0
195.121	539.0	-77.7	-4249.5	-117001.0	-7557337.0	9021.0
195.122	-85.2	411.4	-16497.7	-784608.0	-7966603.0	11668.0
195.123	-418.9	469.5	-18493.7	-864413.0	-9125212.0	13370.0
195.124	-1406.1	598.1	-11864.0	193145.0	-3421517.0	-2499.0
195.125	-1739.6	652.5	-9321.7	111519.0	-4581076.0	-798.0
195.126	-2128.6	818.4	-4850.4	-170013.0	-4731707.0	581.0
195.127	-2462.5	868.6	-6856.9	-244130.0	-5890367.0	2283.0
195.128	737.8	-435.6	313.5	-206944.0	-6490931.0	7816.0
195.129	404.0	-376.0	-1738.0	-290221.0	-7649566.0	9518.0
195.130	15.1	-95.5	-12739.9	-668168.0	-7801171.0	10888.0
195.131	-318.8	-36.9	-14783.0	-749307.0	-8959832.0	12591.0
195.132	-1288.3	512.5	-15811.3	314006.0	-3293649.0	-3135.0
195.133	-1622.0	566.6	-13291.9	232043.0	-4452258.0	-1433.0
195.134	-2247.3	904.0	-9964.5	-286951.0	-4859803.0	1218.0
195.135	-2581.3	954.4	-11981.8	-361405.0	-6017489.0	2920.0
195.136	855.0	-536.6	-3100.5	-64691.0	-6362215.0	7180.0
195.137	521.6	-475.3	-1433.9	-153177.0	-7520749.0	8882.0
195.138	-102.5	-10.6	-17847.0	-782111.0	-7930989.0	11526.0
195.139	-436.3	47.9	-19892.3	-863376.0	-9088624.0	13228.0
195.140	178.8	-332.3	-18946.4	640285.0	-2948665.0	-2508.0
195.141	-154.7	-284.1	-16406.8	562742.0	-4108224.0	-807.0
195.142	-2230.1	601.9	-23340.5	-760233.0	-7315442.0	7742.0
195.143	-2563.8	664.1	-25375.5	-843543.0	-8474052.0	9444.0
195.144	831.6	-391.3	-16602.9	538699.0	-3890148.0	671.0
195.145	498.1	-343.2	-14063.3	461258.0	-5049707.0	2372.0
195.146	-1576.5	658.0	-24872.0	-968058.0	-8258722.0	10914.0
195.147	-1910.3	719.9	-26898.0	-1051000.0	-9417356.0	12616.0
195.148	183.7	-161.7	-20048.0	610794.0	-2960423.0	-2469.0
195.149	-149.8	-107.6	-17504.6	528766.0	-4118982.0	-768.0
195.150	-2224.9	724.4	-22784.3	-755281.0	-7326124.0	7785.0
195.151	-2558.7	786.8	-24816.6	-838755.0	-8484759.0	9486.0
195.152	826.4	-559.1	-15546.7	566290.0	-3879467.0	631.0
195.153	492.9	-511.1	-13001.7	488949.0	-5039026.0	2333.0
195.154	-1581.7	534.2	-25430.9	-972025.0	-8248040.0	10873.0
195.155	-1915.4	594.5	-27425.9	-1053000.0	-9406650.0	12574.0
195.156	571.6	-641.2	-32936.5	1066000.0	-2521071.0	-4636.0
195.157	238.1	-593.3	-30389.4	988616.0	-3679630.0	-2934.0
195.158	-2624.1	874.6	-40475.5	-1143000.0	-7743341.0	9865.0
195.159	-2957.8	937.1	-42506.3	-1226000.0	-8902950.0	11566.0
195.160	1224.3	-701.4	-30597.6	964830.9	-3462579.0	-1456.0
195.161	890.8	-653.5	-28050.5	887543.0	-4621138.0	245.0
195.162	-1970.4	931.3	-42011.6	-1351000.0	-8687595.0	13037.0
195.163	-2304.1	993.7	-44042.8	-1434000.0	-9846205.0	14739.0
195.164	576.6	-467.4	-34030.2	1034000.0	-2532803.0	-4597.0
195.165	243.1	-413.8	-31479.7	952717.0	-3691362.0	-2896.0
195.166	-2619.0	997.2	-39909.4	-1138000.0	-7754048.0	9907.0
195.167	-2952.8	1059.7	-41938.3	-1222000.0	-8912683.0	11608.0
195.168	1219.1	-870.5	-29533.1	993091.0	-3450897.0	-1495.0
195.169	885.6	-822.5	-26986.0	915803.0	-4609456.0	207.0
195.170	-1975.5	809.4	-42565.8	-1356000.0	-8676888.0	12995.0
195.171	-2309.3	871.4	-44600.5	-1439000.0	-9835523.0	14696.0
195.268	-270.7	-94.6	-8003.2	258619.0	-3132636.0	-905.0

195.269	-1382.7	81.2	-107.2	-8515.0	-6996584.0	4766.0
195.270	-993.3	149.3	-5754.4	-135630.0	-4441851.0	2172.0
195.271	-2106.0	342.7	-12545.0	-403469.0	-8303977.0	7844.0
195.272	382.1	-148.2	-5642.5	152451.0	-4074118.0	2273.0
195.273	-729.5	41.3	-811.2	-135534.0	-7938965.0	7942.0
195.274	-339.8	192.8	-7241.8	-333395.0	-5385156.0	5344.0
195.275	-1452.4	386.2	-13911.5	-600360.0	-9247256.0	11016.0
195.276	-152.9	-186.2	-12202.5	385537.0	-3003768.0	-1544.0
195.277	-1264.8	-6.3	-3755.5	113092.0	-6867690.0	4127.0
195.278	-1111.5	236.0	-10898.7	-254230.0	-4570821.0	2808.0
195.279	-2224.4	423.6	-17622.9	-516365.0	-8432997.0	8481.0
195.280	499.9	-241.7	-9836.7	280584.0	-3945251.0	1635.0
195.281	-611.7	-53.7	-2756.3	-3606.0	-7810097.0	7305.0
195.282	-458.0	275.0	-12393.3	-448475.0	-5514126.0	5981.0
195.283	-1570.4	472.6	-19146.1	-718568.0	-9376175.0	11654.0
195.284	-265.8	74.5	-9108.5	230377.0	-3143394.0	-866.0
195.285	-1377.8	252.6	-895.7	-40125.0	-7007342.0	4805.0
195.286	-988.1	319.8	-5265.5	-168580.0	-4453533.0	2211.0
195.287	-2100.8	491.0	-11921.2	-417301.0	-8315658.0	7884.0
195.288	377.0	-289.4	-4550.4	159237.0	-4063412.0	2232.0
195.289	-734.8	-81.4	-1370.3	-140741.0	-7927309.0	7901.0
195.290	-345.1	69.6	-7706.5	-336336.0	-5374500.0	5302.0
195.291	-1457.8	261.4	-14438.9	-603315.0	-9236625.0	10974.0
195.292	-147.9	-17.4	-13298.2	357695.0	-3014500.0	-1504.0
195.293	-1260.0	163.1	-4862.2	84471.0	-6878473.0	4167.0
195.294	-1106.4	406.4	-10399.4	-286872.0	-4581528.0	2848.0
195.295	-2219.4	578.5	-17112.0	-536716.0	-8443729.0	8521.0
195.296	494.8	-380.1	-8737.8	285283.0	-3934543.0	1594.0
195.297	-616.8	-173.4	-1910.4	-14098.0	-7799390.0	7263.0
195.298	-463.3	154.0	-12937.0	-454048.0	-5503470.0	5939.0
195.299	-1575.7	347.1	-19646.0	-720080.0	-9365519.0	11612.0
196.1	-7479.6	146.3	-15048.5	-143351.0	32463550.0	-330.0
196.2	-16373.1	161.1	-19917.5	-162233.0	63498600.0	-1754.0
196.3	-6221.3	292.1	-26087.6	-283334.0	34482590.0	1710.0
196.4	-15114.8	306.6	-30950.2	-302140.0	65517640.0	287.0
196.5	-5756.7	112.4	-11591.7	-110103.0	24970390.0	-253.0
196.6	-14650.2	127.2	-16463.3	-129021.0	56015440.0	-1676.0
196.7	-4498.4	258.1	-22631.2	-250078.0	26989430.0	1788.0
196.8	-13391.9	272.7	-27498.6	-268936.0	58034480.0	365.0
196.9	-25266.6	176.3	-24803.0	-181490.0	94493660.0	-3177.0
196.10	-6598.8	248.4	-22775.8	-241370.0	33876880.0	1098.0
196.11	-24385.7	278.2	-32528.4	-279459.0	95917010.0	-1748.0
196.12	-23543.7	142.5	-21353.9	-148448.0	87050500.0	-3100.0
196.13	-4875.9	214.4	-19319.4	-208117.0	26383720.0	1176.0
196.14	-22662.8	244.5	-29078.9	-246490.0	88463850.0	-1671.0
196.15	-15492.3	263.0	-27637.9	-260214.0	64911920.0	-325.0
196.16	-13769.4	229.1	-24186.9	-226964.0	57428770.0	-248.0
196.17	-3475.6	140.0	-12847.9	-135216.0	18498760.0	311.0
196.18	-12369.2	154.5	-17704.9	-153871.0	49533790.0	-1112.0
196.19	-2217.4	285.7	-23885.3	-275171.0	20517780.0	2352.0
196.20	-11110.9	300.1	-28740.8	-293771.0	51552830.0	929.0
196.21	-1752.7	106.1	-9391.8	-102014.0	11005600.0	389.0
196.22	-10646.3	120.6	-14250.3	-120636.0	42040630.0	-1035.0
196.23	-494.5	251.9	-20430.1	-242082.0	13024620.0	2430.0
196.24	-9388.0	266.1	-25285.0	-260562.0	44059670.0	1006.0
196.25	-21262.7	169.6	-22585.2	-172999.0	80578840.0	-2535.0
196.26	-2594.9	242.0	-20573.0	-233171.0	19912060.0	1740.0
196.27	-20381.9	271.5	-30310.3	-270928.0	81992170.0	-1107.0
196.28	-19539.8	135.7	-19133.2	-139810.0	73085680.0	-2458.0
196.29	-872.0	208.0	-17116.3	-199889.0	12418910.0	1817.0



196.30	-18659.0	237.6	-26859.3	-237794.0	74499020.0	-1029.0
196.31	-806.3	135.8	-11381.9	-129867.0	9183562.0	739.0
196.32	-9699.9	150.1	-16231.3	-148300.0	40220590.0	-684.0
196.33	74.4	237.7	-19104.3	-227665.0	10598860.0	2168.0
196.34	-8819.1	252.2	-23959.5	-246329.0	41633920.0	744.0
196.35	916.6	102.0	-7926.0	-96795.0	1692404.0	816.0
196.36	-7977.0	116.2	-12775.6	-115063.0	32727430.0	-607.0
196.37	1797.3	203.7	-15647.6	-194354.0	3104706.0	2245.0
196.38	-7096.3	218.1	-20502.5	-212992.0	34140740.0	822.0
196.39	-11488.4	256.5	-25428.4	-251864.0	50947120.0	317.0
196.40	-9765.5	222.5	-21971.8	-218558.0	43453960.0	394.0
196.41	-9081.1	148.9	-15929.1	-146650.0	38047490.0	-587.0
196.42	-17974.7	163.8	-20803.0	-165598.0	69092510.0	-2010.0
196.43	-7822.9	294.5	-26968.8	-286557.0	40066500.0	1454.0
196.44	-16716.4	309.3	-31837.0	-305501.0	71111560.0	31.0
196.45	-7358.3	114.9	-12472.3	-113408.0	30564300.0	-510.0
196.46	-16251.8	129.9	-17348.9	-132415.0	61599360.0	-1933.0
196.47	-6100.0	260.6	-23512.6	-253371.0	32573340.0	1531.0
196.48	-14993.5	275.4	-28385.4	-272337.0	63618400.0	108.0
196.49	-26868.1	179.1	-25690.6	-184982.0	100087600.0	-3434.0
196.50	-8200.4	250.9	-23657.0	-244664.0	39460790.0	842.0
196.51	-25987.3	280.9	-33416.4	-282934.0	101510900.0	-2005.0
196.52	-25145.2	145.2	-22242.9	-151887.0	92634440.0	-3356.0
196.53	-6477.5	216.9	-20199.9	-211334.0	31967630.0	919.0
196.54	-24264.4	247.2	-29967.4	-249968.0	94047760.0	-1928.0
196.55	-17093.9	265.7	-28524.6	-263577.0	70505840.0	-582.0
196.56	-15371.0	231.8	-25073.9	-230347.0	63012680.0	-504.0
196.57	-10148.9	150.6	-16516.3	-148857.0	41776750.0	-758.0
196.58	-19042.4	165.5	-21393.2	-167862.0	72811800.0	-2181.0
196.59	-9268.1	252.6	-24244.4	-246874.0	43190070.0	670.0
196.60	-18161.6	267.4	-29115.8	-265818.0	74225130.0	-753.0
196.61	-8426.0	116.7	-13059.7	-115616.0	34283590.0	-681.0
196.62	-17319.5	131.7	-17939.1	-134705.0	65328640.0	-2104.0
196.63	-7545.2	218.6	-20787.4	-213525.0	35696920.0	748.0
196.64	-16438.7	233.5	-25665.2	-232613.0	66731970.0	-675.0
196.108	-6674.9	108.9	-4433.8	40265.0	22687580.0	1166.0
196.109	-8716.8	198.8	-11805.9	-36538.0	29949860.0	3328.0
196.110	-4670.0	-6.7	-18023.1	-3796.0	31315920.0	4777.0
196.111	-6712.5	84.0	-23516.4	-81085.0	38588050.0	6941.0
196.112	-3777.3	326.0	-17272.3	-280264.0	13012270.0	-5807.0
196.113	-5817.6	417.1	-25180.5	-353542.0	20284950.0	-3645.0
196.114	-1759.5	304.1	-35727.6	-374413.0	21673880.0	-2198.0
196.115	-3803.1	396.8	-42572.2	-448047.0	28935720.0	-34.0
196.116	-6707.5	225.5	-2767.2	-179494.0	22149310.0	726.0
196.117	-8749.6	314.5	-10157.4	-255016.0	29421540.0	2888.0
196.118	-4631.5	-129.0	-26593.8	233620.0	31865680.0	5217.0
196.119	-6674.0	-38.0	-32324.8	155585.0	39127810.0	7381.0
196.120	-3809.8	442.1	-15769.5	-498805.0	12484030.0	-6247.0
196.121	-5851.9	533.7	-23639.6	-573211.0	19746250.0	-4084.0
196.122	-1727.3	158.1	-41349.2	-106596.0	22202040.0	-1756.0
196.123	-3771.1	254.2	-46701.0	-185921.0	29463840.0	408.0
196.124	-6666.8	56.6	-7013.0	125011.0	22369630.0	1052.0
196.125	-8709.7	146.4	-12848.9	47302.0	29631660.0	3215.0
196.126	-4666.5	-63.0	-22827.8	92256.0	30986810.0	4662.0
196.127	-6709.0	27.0	-28590.7	15476.0	38258940.0	6826.0
196.128	-3757.8	503.4	-27035.3	-417868.0	13387210.0	-5691.0
196.129	-5801.0	597.7	-34666.8	-494299.0	20659160.0	-3528.0
196.130	-1741.9	461.3	-45444.9	-485380.0	22048340.0	-2081.0
196.131	-3785.6	554.0	-52303.6	-558878.0	29310160.0	84.0
196.132	-6704.5	154.5	-2074.1	-69648.0	21820070.0	612.0

196.133	-8746.6	243.7	-9446.2	-145865.0	29092300.0	2775.0
196.134	-4628.3	-183.5	-31637.6	326132.0	31536490.0	5104.0
196.135	-6670.7	-92.4	-37389.5	247545.0	38808640.0	7268.0
196.136	-3793.5	618.3	-25554.7	-635039.0	12858160.0	-6132.0
196.137	-5836.4	713.3	-33208.7	-713778.0	20120180.0	-3969.0
196.138	-1708.5	343.1	-46215.2	-259661.0	22576810.0	-1641.0
196.139	-3752.0	436.4	-53069.6	-334135.0	29838680.0	524.0
196.140	-8005.4	304.9	2459.7	-35575.0	9230231.0	-5475.0
196.141	-10048.0	386.8	-4902.3	-105684.0	16492330.0	-3313.0
196.142	-1301.8	-4.6	-56216.5	-185098.0	38059930.0	6552.0
196.143	-3345.2	96.0	-61501.9	-268216.0	45321820.0	8717.0
196.144	-7141.8	347.6	122.6	-121303.0	6321197.0	-7568.0
196.145	-9184.4	429.4	-7239.3	-191272.0	13581300.0	-5406.0
196.146	-427.3	102.8	-61668.8	-292852.0	35161660.0	4461.0
196.147	-2470.5	204.1	-66967.6	-376895.0	42433610.0	6625.0
196.148	-8004.2	286.8	2673.8	-5877.0	9130535.0	-5509.0
196.149	-10046.0	376.7	-4686.3	-82660.0	16402840.0	-3346.0
196.150	-1307.5	-54.3	-54972.1	-147993.0	37948480.0	6517.0
196.151	-3350.4	46.8	-60294.2	-231693.0	45210510.0	8681.0
196.152	-7142.0	367.3	-164.0	-151568.0	6421146.0	-7534.0
196.153	-9185.2	448.7	-7512.2	-220948.0	13681090.0	-5372.0
196.154	-423.0	150.5	-62823.9	-328012.0	35272750.0	4496.0
196.155	-2466.0	252.4	-68171.4	-413699.0	42534750.0	6660.0
196.156	-8111.7	690.4	7958.5	-766634.0	7460278.0	-6941.0
196.157	-10155.2	771.6	615.7	-835736.1	14725150.0	-4779.0
196.158	-1178.0	-408.3	-82293.5	588011.0	39861320.0	8023.0
196.159	-3220.7	-307.0	-87629.5	504152.0	47123390.0	10188.0
196.160	-7248.9	730.8	5611.9	-850450.0	4550042.0	-9034.0
196.161	-9292.4	812.0	-1730.9	-919551.0	11813910.0	-6871.0
196.162	-303.7	-300.3	-87640.1	480213.0	36973000.0	5932.0
196.163	-2346.4	-199.0	-92976.5	396314.0	44235070.0	8096.0
196.164	-8109.5	677.4	8184.9	-741235.0	7363836.0	-6975.0
196.165	-10152.3	766.2	843.7	-816734.0	14625880.0	-4812.0
196.166	-1182.4	-457.2	-81213.8	623801.0	39750200.0	7989.0
196.167	-3225.1	-356.1	-86548.1	540162.0	47022280.0	10153.0
196.168	-7251.1	747.6	5348.5	-877793.0	4647484.0	-9000.0
196.169	-9294.6	828.8	-1994.3	-946895.0	11913350.0	-6838.0
196.170	-297.3	-249.6	-88891.6	442265.0	37084620.0	5967.0
196.171	-2340.7	-149.2	-94180.0	359321.0	44346520.0	8132.0
196.268	-3283.5	59.5	1545.6	19829.0	10807470.0	-3798.0
196.269	-10090.7	358.5	-22995.2	-235346.0	35031500.0	3412.0
196.270	-1275.7	-63.5	-15800.5	-9284.0	19446550.0	-191.0
196.271	-8086.0	260.0	-34093.2	-280183.0	43669790.0	7024.0
196.272	-2417.4	112.2	-786.1	-75875.0	7904068.0	-5890.0
196.273	-9222.9	396.8	-26301.0	-310416.0	32131530.0	1318.0
196.274	-401.1	38.5	-20968.6	-119031.0	16558300.0	-2282.0
196.275	-7210.3	366.3	-41627.2	-391840.0	40781830.0	4932.0
196.276	-3314.4	177.2	3187.3	-201453.0	10279630.0	-4237.0
196.277	-10122.8	473.7	-21336.9	-453230.0	34503360.0	2971.0
196.278	-1237.6	-180.9	-23802.4	220933.0	19996210.0	251.0
196.279	-8048.4	140.8	-41175.2	-51730.0	44209330.0	7465.0
196.280	-2450.1	226.3	867.0	-293784.0	7371778.0	-6330.0
196.281	-9257.1	513.2	-24780.1	-530173.0	31592860.0	879.0
196.282	-363.6	-83.0	-28773.9	113783.0	17097810.0	-1841.0
196.283	-7175.4	241.0	-46485.6	-153896.0	41310680.0	5373.0
196.284	-3282.6	38.5	1751.5	52420.0	10707700.0	-3832.0
196.285	-10089.3	337.5	-22787.7	-202787.0	34931860.0	3378.0
196.286	-1275.5	-77.3	-15877.8	13123.0	19346600.0	-225.0
196.287	-8086.7	237.3	-32981.9	-260484.0	43569620.0	6989.0
196.288	-2415.6	150.2	-2597.6	-111790.0	8008525.0	-5855.0

196.289	-9219.1	450.4	-29148.3	-351919.0	32242500.0	1354.0
196.290	-395.7	93.6	-22233.3	-162953.0	16669670.0	-2247.0
196.291	-7205.0	412.7	-44492.9	-424386.0	40893170.0	4967.0
196.292	-3315.1	155.3	3428.6	-167615.0	10179460.0	-4272.0
196.293	-10121.7	453.4	-21132.6	-421813.0	34403640.0	2938.0
196.294	-1238.0	-194.3	-23772.2	242810.0	19896100.0	216.0
196.295	-8049.2	113.5	-41022.8	-21103.0	44109120.0	7431.0
196.296	-2448.0	266.6	-1100.1	-330732.0	7477310.0	-6295.0
196.297	-9252.5	567.3	-27640.5	-572746.0	31704030.0	913.0
196.298	-359.1	-32.7	-29920.6	77102.0	17208950.0	-1806.0
196.299	-7171.1	286.7	-47665.9	-186623.0	41421770.0	5408.0
198.1	1511.4	-27.7	-256.5	25402.0	-462771.5	-2033.0
198.2	2112.8	-30.8	-248.2	27435.0	-292774.6	-3743.0
198.3	1973.5	-52.6	-278.1	46210.0	603247.9	-2183.0
198.4	2575.0	-56.0	-284.1	48502.0	773291.3	-3893.0
198.5	1162.2	-21.3	-200.8	19554.0	-359352.2	-1563.0
198.6	1763.7	-24.3	-192.4	21557.0	-189324.9	-3273.0
198.7	1624.4	-46.3	-222.3	40449.0	706697.6	-1714.0
198.8	2225.9	-49.6	-230.0	42671.0	876755.9	-3424.0
198.9	2714.4	-33.6	-244.4	29252.0	-122671.9	-5453.0
198.10	1834.9	-45.1	-270.9	39846.0	283432.9	-2138.0
198.11	3037.9	-51.2	-277.1	43983.0	623588.6	-5558.0
198.12	2365.2	-27.0	-192.3	23273.0	-19238.5	-4983.0
198.13	1485.7	-38.7	-215.3	34072.0	386857.3	-1668.0
198.14	2688.7	-44.6	-226.1	37948.0	727016.9	-5088.0
198.15	2436.4	-48.3	-273.8	42085.0	453482.2	-3848.0
198.16	2087.2	-42.0	-218.6	36299.0	556917.6	-3378.0
198.17	1240.5	-26.1	-258.3	24257.0	-537985.2	-1263.0
198.18	1842.0	-29.4	-250.1	26497.0	-367996.9	-2973.0
198.19	1702.7	-51.1	-276.2	45067.0	528035.6	-1413.0
198.20	2304.2	-54.6	-278.5	47528.0	698061.9	-3123.0
198.21	891.4	-19.7	-203.6	18380.0	-434542.5	-793.0
198.22	1492.8	-23.0	-193.5	20633.0	-264574.6	-2503.0
198.23	1353.6	-44.6	-222.1	39177.0	631490.3	-943.0
198.24	1955.0	-48.2	-224.6	41717.0	801489.3	-2653.0
198.25	2443.5	-32.3	-243.1	28363.0	-197936.5	-4683.0
198.26	1564.0	-43.4	-268.3	38664.0	208200.2	-1368.0
198.27	2767.1	-49.9	-272.6	43121.0	548342.2	-4788.0
198.28	2094.4	-25.8	-188.8	22483.0	-94478.9	-4213.0
198.29	1214.9	-37.2	-212.2	32937.0	311647.9	-898.0
198.30	2417.9	-43.5	-219.7	37226.0	651778.5	-4318.0
198.31	1060.0	-25.1	-261.4	23451.0	-588109.0	-749.0
198.32	1661.5	-28.5	-251.1	25874.0	-418130.7	-2459.0
198.33	1383.5	-42.4	-266.3	37922.0	158064.4	-854.0
198.34	1985.0	-45.9	-266.9	40392.0	328087.8	-2564.0
198.35	710.8	-18.5	-208.1	17442.0	-484687.7	-279.0
198.36	1312.3	-22.1	-194.9	20014.0	-314710.3	-1989.0
198.37	1034.3	-36.2	-210.0	32227.0	261484.8	-385.0
198.38	1635.8	-39.6	-210.7	34674.0	431514.1	-2095.0
198.39	2165.5	-46.9	-270.3	41102.0	378226.5	-3078.0
198.40	1816.4	-40.6	-215.1	35356.0	481676.2	-2608.0
198.41	1619.7	-28.3	-257.0	25816.0	-432698.1	-2341.0
198.42	2221.2	-31.3	-248.0	27799.0	-262663.8	-4051.0
198.43	2081.9	-53.3	-279.2	46735.0	633351.8	-2492.0
198.44	2683.4	-56.5	-285.6	48885.0	803412.1	-4201.0
198.45	1270.5	-21.9	-201.3	19962.0	-329278.8	-1871.0
198.46	1872.0	-24.9	-192.8	21895.0	-159238.4	-3581.0
198.47	1732.7	-46.9	-224.3	40900.0	736780.1	-2022.0
198.48	2334.2	-50.1	-231.8	43019.0	906848.4	-3732.0
198.49	2822.7	-34.0	-245.7	29532.0	-92584.4	-5761.0

198.50	1943.2	-45.7	-272.2	40301.0	313512.4	-2446.0
198.51	3146.2	-51.6	-279.3	44277.0	653678.0	-5866.0
198.52	2473.5	-27.5	-194.0	23604.0	10851.0	-5291.0
198.53	1594.0	-39.4	-215.8	34575.0	416938.7	-1977.0
198.54	2797.1	-45.1	-227.6	38249.0	757131.7	-5397.0
198.55	2544.7	-48.9	-275.0	42468.0	483575.7	-4156.0
198.56	2195.6	-42.5	-220.3	36663.0	587037.4	-3687.0
198.57	1691.9	-28.7	-257.5	26083.0	-412648.7	-2547.0
198.58	2293.4	-31.6	-248.1	28024.0	-242606.5	-4256.0
198.59	2015.4	-46.1	-273.2	40589.0	333567.7	-2652.0
198.60	2616.9	-49.2	-275.9	42724.0	503639.0	-4362.0
198.61	1342.7	-22.3	-201.7	20228.0	-309229.4	-2077.0
198.62	1944.2	-25.2	-193.7	22099.0	-139178.1	-3787.0
198.63	1666.3	-39.8	-216.9	34881.0	437018.4	-2182.0
198.64	2267.8	-42.8	-221.5	36897.0	607098.7	-3892.0
198.108	1198.5	4.4	-8881.8	243822.0	-2046120.0	-1141.0
198.109	1534.4	-15.2	-9110.8	265882.0	-1055953.0	-4102.0
198.110	1890.8	122.7	-6455.2	30946.0	-652587.6	-4454.0
198.111	2226.5	102.1	-6474.8	54625.0	336457.1	-7414.0
198.112	475.8	-133.8	3333.3	1686.0	-188382.9	4159.0
198.113	812.3	-148.4	3341.4	19337.0	802944.7	1196.0
198.114	1172.8	90.6	479.0	-307942.0	1215369.0	841.0
198.115	1508.2	73.9	1143.4	-286124.0	2204404.0	-2119.0
198.116	1092.5	68.1	-7290.7	212814.0	-2186997.0	-1130.0
198.117	1428.3	46.8	-7496.8	237471.0	-1196855.0	-4092.0
198.118	1999.3	50.7	-8107.0	81752.0	-508077.5	-4468.0
198.119	2335.1	30.7	-8343.8	104166.0	481554.6	-7429.0
198.120	369.9	-70.5	2079.8	-29274.0	-329049.8	4170.0
198.121	705.7	-86.9	2068.4	-8891.0	660881.2	1208.0
198.122	1278.7	19.3	1957.1	-259936.0	1355214.0	832.0
198.123	1613.9	3.7	2623.3	-239934.0	2344204.0	-2128.0
198.124	1153.5	193.9	-15321.7	305364.0	-1969530.0	-1123.0
198.125	1488.9	174.9	-15556.5	326163.0	-979489.4	-4085.0
198.126	1843.8	321.8	-12565.1	80491.0	-579504.5	-4435.0
198.127	2179.7	300.1	-12855.3	105734.0	410521.9	-7396.0
198.128	532.7	-232.1	3734.0	-108633.0	-244197.9	4130.0
198.129	868.3	-246.9	3600.8	-88956.0	744922.4	1168.0
198.130	1229.4	-29.2	710.3	-387302.0	1158068.0	812.0
198.131	1564.8	-46.2	1412.0	-364831.0	2146755.0	-2148.0
198.132	1045.5	254.4	-13788.3	278208.0	-2113914.0	-1111.0
198.133	1381.5	234.6	-14048.8	299958.0	-1123721.0	-4073.0
198.134	1952.3	253.3	-14391.7	125179.0	-434209.4	-4449.0
198.135	2288.2	233.5	-14646.9	147143.0	555306.1	-7410.0
198.136	426.0	-175.5	2477.9	-130163.0	-387095.7	4140.0
198.137	761.4	-189.0	2405.8	-113323.0	602191.9	1179.0
198.138	1335.4	-96.1	2240.5	-346516.0	1299307.0	803.0
198.139	1670.8	-112.2	2890.7	-325450.0	2287631.0	-2158.0
198.140	137.9	-220.2	-7514.7	435403.0	-3027036.0	4582.0
198.141	473.5	-247.2	-7826.2	464237.0	-2037944.0	1620.0
198.142	2453.7	293.2	-11791.4	-373533.0	1634136.0	-6478.0
198.143	2789.1	283.4	-11323.3	-359495.0	2623176.0	-9439.0
198.144	-81.0	-283.3	-3212.6	379547.0	-2473538.0	6172.0
198.145	254.6	-310.4	-3525.0	408526.0	-1484446.0	3210.0
198.146	2238.9	304.4	-9508.5	-489909.0	2195673.0	-4889.0
198.147	2574.4	294.7	-9042.1	-475991.0	3184739.0	-7849.0
198.148	123.9	-161.0	-9421.6	451414.0	-3004585.0	4588.0
198.149	459.8	-180.4	-9687.8	473211.0	-2014418.0	1627.0
198.150	2436.7	329.1	-12202.9	-349487.0	1651825.0	-6471.0
198.151	2772.3	318.0	-11676.5	-333489.0	2640917.0	-9431.0
198.152	-66.5	-346.8	-1755.7	370666.0	-2495861.0	6165.0

198.153	268.9	-372.1	-1932.2	397285.0	-1506820.0	3204.0
198.154	2255.3	271.5	-9509.8	-518875.0	2177831.0	-4897.0
198.155	2590.9	260.4	-9007.4	-503748.0	3166923.0	-7857.0
198.156	-214.5	-18.2	-6550.2	342807.0	-3494386.0	4619.0
198.157	120.7	-42.8	-6734.5	368394.0	-2505397.0	1657.0
198.158	2812.9	69.7	-13290.8	-235965.0	2114211.0	-6518.0
198.159	3148.6	58.0	-12800.0	-219226.0	3103328.0	-9478.0
198.160	-433.6	-79.8	-5327.7	283331.0	-2941939.0	6209.0
198.161	-98.4	-104.4	-5511.9	308920.0	-1952949.0	3247.0
198.162	2597.9	81.4	-7113.3	-351594.0	2675698.0	-4929.0
198.163	2933.6	69.8	-6622.5	-334923.0	3664814.0	-7889.0
198.164	-228.2	42.9	-5784.6	358951.0	-3471860.0	4625.0
198.165	107.3	25.7	-6000.7	377631.0	-2481794.0	1664.0
198.166	2796.5	102.1	-16500.7	-207936.0	2132053.0	-6510.0
198.167	3132.2	90.1	-16010.3	-190835.0	3121169.0	-9471.0
198.168	-419.8	-138.2	-6091.9	266204.0	-2965440.0	6202.0
198.169	-84.6	-162.8	-6276.1	291793.0	-1976450.0	3241.0
198.170	2615.1	43.9	-4960.6	-372534.0	2659059.0	-4936.0
198.171	2950.6	33.7	-4489.5	-358146.0	3648125.0	-7896.0
198.268	551.3	-38.0	-3376.5	139359.0	-2555218.0	4173.0
198.269	1670.7	-105.0	-4301.0	215525.0	744350.0	-5699.0
198.270	1244.6	92.8	-4750.0	-87452.0	-1159432.0	855.0
198.271	2363.2	43.7	-3938.8	-25150.0	2137190.0	-9012.0
198.272	333.3	-94.8	401.5	77569.0	-2000492.0	5764.0
198.273	1453.2	-161.6	84.6	151443.0	1300624.0	-4110.0
198.274	1029.9	95.3	-2888.9	-197515.0	-597638.9	2444.0
198.275	2148.9	46.6	-973.2	-134438.0	2699854.0	-7424.0
198.276	445.9	21.5	-2204.9	113969.0	-2694942.0	4184.0
198.277	1564.9	-40.0	-2743.2	182312.0	604035.4	-5689.0
198.278	1352.8	27.5	-5816.4	-46626.0	-1014998.0	843.0
198.279	2471.3	-25.7	-5201.3	18456.0	2281598.0	-9025.0
198.280	227.3	-32.3	-908.1	46375.0	-2141368.0	5775.0
198.281	1346.6	-98.8	-1134.0	120911.0	1158644.0	-4098.0
198.282	1137.7	26.2	-1500.9	-152855.0	-453438.2	2433.0
198.283	2255.6	-20.0	422.4	-93212.0	2841908.0	-7435.0
198.284	537.2	18.4	-5307.3	158279.0	-2532793.0	4179.0
198.285	1656.8	-47.9	-6225.0	233325.0	766812.6	-5693.0
198.286	1230.1	157.1	-5420.3	-80777.0	-1138108.0	862.0
198.287	2348.2	93.6	-5525.0	-7957.0	2158386.0	-9006.0
198.288	348.8	-136.9	149.0	51882.0	-2020562.0	5756.0
198.289	1469.6	-192.1	167.6	120573.0	1282311.0	-4118.0
198.290	1046.8	64.7	-2957.0	-228098.0	-614727.9	2436.0
198.291	2165.8	10.5	-937.3	-158574.0	2683139.0	-7433.0
198.292	431.2	82.2	-3737.0	127154.0	-2673669.0	4191.0
198.293	1550.9	16.1	-4621.7	201249.0	626228.7	-5683.0
198.294	1338.1	90.8	-6637.8	-38403.0	-993724.7	850.0
198.295	2456.4	26.1	-6440.9	35339.0	2302820.0	-9019.0
198.296	242.9	-72.7	-1107.1	19766.0	-2160413.0	5767.0
198.297	1363.2	-128.7	-1037.9	88776.0	1140986.0	-4107.0
198.298	1154.3	-4.2	-1577.4	-183306.0	-471222.3	2425.0
198.299	2272.1	-57.8	532.7	-115511.0	2824091.0	-7443.0
200.1	-7480.1	-151.1	-15064.7	147190.0	32523420.0	342.0
200.2	-16383.5	-170.8	-19916.9	169773.0	63585960.0	1782.0
200.3	-6227.6	-294.7	-26100.1	285170.0	34540990.0	-1699.0
200.4	-15131.0	-315.0	-30956.4	308453.0	65613540.0	-259.0
200.5	-5757.1	-116.0	-11603.5	112990.0	25010290.0	262.0
200.6	-14660.4	-135.7	-16456.5	135554.0	56082860.0	1702.0
200.7	-4504.5	-259.7	-22639.7	251001.0	27037880.0	-1779.0
200.8	-13408.0	-280.0	-27499.2	274424.0	58100400.0	-339.0
200.9	-25286.9	-190.7	-24779.8	192800.0	94688500.0	3221.0



200.10	-6603.3	-251.6	-22790.3	243767.0	33935740.0	-1086.0
200.11	-24410.2	-291.8	-32507.0	290183.0	96110790.0	1793.0
200.12	-23563.9	-155.7	-21321.1	158817.0	87155380.0	3141.0
200.13	-4880.3	-216.5	-19329.4	209569.0	26432600.0	-1166.0
200.14	-22687.2	-256.8	-29049.4	256069.0	88567660.0	1713.0
200.15	-15506.7	-271.7	-27639.9	266789.0	64998280.0	353.0
200.16	-13783.7	-236.7	-24184.6	232731.0	57495140.0	273.0
200.17	-3471.8	-142.2	-12865.8	137228.0	18539720.0	-307.0
200.18	-12375.1	-162.1	-17714.1	159782.0	49602290.0	1133.0
200.19	-2219.2	-285.8	-23900.9	275052.0	20557320.0	-2347.0
200.20	-11122.6	-306.0	-28752.7	298110.0	51629860.0	-908.0
200.21	-1748.8	-107.2	-9405.5	103072.0	11036590.0	-387.0
200.22	-10652.1	-126.9	-14253.5	125541.0	42099160.0	1053.0
200.23	-496.2	-250.8	-20438.4	240990.0	13054190.0	-2427.0
200.24	-9399.6	-271.0	-25292.4	264003.0	44126730.0	-988.0
200.25	-21278.5	-181.7	-22569.6	182482.0	80674840.0	2572.0
200.26	-2595.0	-242.6	-20588.7	233640.0	19952040.0	-1735.0
200.27	-20401.8	-282.9	-30299.7	279814.0	82087130.0	1144.0
200.28	-19555.5	-146.8	-19113.5	148426.0	73171700.0	2492.0
200.29	-871.9	-207.6	-17129.2	199476.0	12448930.0	-1815.0
200.30	-18678.8	-247.9	-26842.5	245765.0	74583980.0	1064.0
200.31	-799.6	-136.4	-11401.9	130648.0	9216262.0	-739.0
200.32	-9702.9	-156.3	-16246.6	153154.0	40289830.0	700.0
200.33	77.2	-236.8	-19123.4	226945.0	10629570.0	-2168.0
200.34	-8826.1	-256.8	-23972.3	249747.0	41702140.0	-728.0
200.35	923.4	-101.3	-7938.4	96432.0	1712128.0	-819.0
200.36	-7979.9	-121.1	-12785.5	118922.0	32776700.0	620.0
200.37	1800.3	-201.8	-15665.0	192810.0	3127466.0	-2248.0
200.38	-7103.1	-221.8	-20512.2	215608.0	34199010.0	-808.0
200.39	-11498.4	-262.8	-25438.0	256568.0	51024580.0	-296.0
200.40	-9775.3	-227.8	-21978.8	222441.0	43521470.0	-376.0
200.41	-9083.5	-154.6	-15944.0	151224.0	38106880.0	602.0
200.42	-17986.8	-174.3	-20798.3	173790.0	69179440.0	2041.0
200.43	-7830.9	-298.3	-26982.8	289296.0	40134480.0	-1439.0
200.44	-16734.3	-318.6	-31839.3	312604.0	71207020.0	0.4
200.45	-7360.4	-119.5	-12482.3	117009.0	30603770.0	522.0
200.46	-16263.8	-139.2	-17337.6	139585.0	61676310.0	1961.0
200.47	-6107.9	-263.3	-23520.2	255106.0	32631340.0	-1519.0
200.48	-15011.3	-283.6	-28382.8	278525.0	63693890.0	-80.0
200.49	-26890.2	-194.2	-25664.1	196876.0	100282000.0	3481.0
200.50	-8206.7	-255.2	-23670.3	247820.0	39529190.0	-827.0
200.51	-26013.5	-295.4	-33390.1	294299.0	101704300.0	2052.0
200.52	-25167.2	-159.3	-22205.7	162931.0	92748860.0	3401.0
200.53	-6483.6	-220.1	-20209.7	213653.0	32026080.0	-907.0
200.54	-24290.5	-260.4	-29933.0	260198.0	94141140.0	1972.0
200.55	-17110.1	-275.2	-28522.6	270915.0	70591730.0	613.0
200.56	-15387.1	-240.3	-25067.5	236872.0	63088600.0	533.0
200.57	-10152.3	-157.0	-16530.2	153927.0	41835880.0	775.0
200.58	-19055.7	-176.6	-21385.3	176471.0	72908420.0	2214.0
200.59	-9275.5	-257.5	-24256.4	250522.0	43258200.0	-654.0
200.60	-18179.0	-277.6	-29111.3	273685.0	74320710.0	786.0
200.61	-8429.3	-121.9	-13068.6	119706.0	34332750.0	695.0
200.62	-17332.7	-141.5	-17923.9	142302.0	65405290.0	2134.0
200.63	-7552.5	-222.5	-20796.7	216386.0	35755060.0	-734.0
200.64	-16456.0	-242.7	-25656.2	239622.0	66817580.0	706.0
200.108	-3846.8	-211.6	-20686.7	293525.0	12494640.0	6303.0
200.109	-5879.4	-311.7	-28139.5	376199.0	19739280.0	4125.0
200.110	-1766.6	-39.2	-42541.7	9722.0	22232080.0	1777.0
200.111	-3801.5	-144.0	-47655.1	97688.0	29476130.0	-403.0
200.112	-6707.0	-91.9	8148.0	120927.0	22189440.0	-705.0

200.113	-8738.8	-184.6	127.5	194248.0	29444280.0	-2883.0
200.114	-4629.5	199.4	-22299.7	-266432.0	31926190.0	-5229.0
200.115	-6663.1	104.4	-27700.4	-190787.0	39170570.0	-7409.0
200.116	-3812.8	-53.2	-22167.9	84333.0	13033270.0	5864.0
200.117	-5843.5	-153.4	-29635.3	166746.0	20278380.0	3686.0
200.118	-1800.2	-229.4	-36354.8	272999.0	21693560.0	2219.0
200.119	-3834.6	-331.6	-43002.0	356499.0	28937740.0	39.0
200.120	-6673.2	69.7	6530.0	-91559.0	22728010.0	-1145.0
200.121	-8704.9	-24.0	-1488.5	-16879.0	29972870.0	-3323.0
200.122	-4668.5	31.9	-14404.5	-38734.0	31376300.0	-4790.0
200.123	-6702.2	-63.6	-19745.3	37343.0	38620660.0	-6969.0
200.124	-3846.2	-176.3	-35169.4	256728.0	12774800.0	6203.0
200.125	-5878.7	-276.5	-42579.7	339184.0	20019460.0	4025.0
200.126	-1765.0	21.4	-49252.1	-59519.0	22512480.0	1677.0
200.127	-3797.7	-96.3	-55416.2	46881.0	29757090.0	-502.0
200.128	-6713.6	73.6	18921.8	-38338.0	21907770.0	-598.0
200.129	-8745.0	-18.8	10924.0	35036.0	29162710.0	-2777.0
200.130	-4634.1	333.7	-20117.9	-381366.0	31655020.0	-5123.0
200.131	-6667.4	239.3	-25559.8	-306349.0	38899480.0	-7303.0
200.132	-3809.5	-18.9	-36613.0	47903.0	13314100.0	5764.0
200.133	-5840.9	-118.7	-44016.5	128811.0	20569040.0	3585.0
200.134	-1799.2	-150.6	-46976.0	175147.0	21973810.0	2117.0
200.135	-3833.4	-254.7	-54139.4	261412.0	29218040.0	-62.0
200.136	-6673.1	204.1	14767.4	-206896.0	22458040.0	-1037.0
200.137	-8706.3	119.5	7957.5	-144804.0	29702520.0	-3216.0
200.138	-4671.9	170.2	-12245.6	-160014.0	31105440.0	-4682.0
200.139	-6706.2	74.6	-17566.6	-83371.0	38349640.0	-6862.0
200.140	-7278.9	-444.5	6071.2	628323.0	4534435.0	9120.0
200.141	-9310.5	-549.8	-1651.7	713433.0	11779320.0	6941.0
200.142	-326.4	307.3	-87814.8	-482560.0	37037240.0	-5963.0
200.143	-2361.2	213.2	-92931.2	-404677.0	44281320.0	-8142.0
200.144	-8130.8	-432.9	15393.1	596236.0	7454436.0	7016.0
200.145	-10162.4	-538.4	7664.5	681447.0	14703320.0	4837.0
200.146	-1188.8	410.9	-81823.8	-595045.0	39938580.0	-8063.0
200.147	-3223.6	316.8	-86939.6	-517233.0	47182660.0	-10243.0
200.148	-7279.6	-433.6	1798.8	618479.0	4616258.0	9090.0
200.149	-9312.3	-533.1	-5673.1	700451.0	11858870.0	6911.0
200.150	-322.3	266.8	-88640.6	-447920.0	37118280.0	-5995.0
200.151	-2357.6	173.2	-93717.3	-370606.0	44362230.0	-8175.0
200.152	-8129.8	-434.6	19805.0	595557.0	7373689.0	7046.0
200.153	-10160.7	-540.6	12055.6	681339.0	14623760.0	4867.0
200.154	-1191.4	449.6	-81132.7	-627983.0	39847920.0	-8031.0
200.155	-3226.1	354.7	-86280.3	-550109.0	47092020.0	-10211.0
200.156	-7168.0	84.4	1066.5	-71074.0	6321554.0	7656.0
200.157	-9198.6	-21.8	-6693.0	14953.0	13567700.0	5477.0
200.158	-454.5	-240.8	-61867.6	262591.0	35214760.0	-4494.0
200.159	-2490.0	-334.7	-66939.3	340235.0	42458660.0	-6673.0
200.160	-8019.1	95.6	10309.3	-102500.0	9246757.0	5551.0
200.161	-10049.7	-10.6	2549.8	-16472.0	16491900.0	3372.0
200.162	-1316.6	-138.3	-55807.5	150701.0	38116180.0	-6594.0
200.163	-3352.1	-231.8	-60871.5	227811.0	45360080.0	-8774.0
200.164	-7169.9	97.3	-3046.7	-82037.0	6400072.0	7626.0
200.165	-9201.6	-3.2	-10565.4	940.0	13646930.0	5448.0
200.166	-451.8	-279.4	-62653.6	295466.0	35295450.0	-4526.0
200.167	-2486.9	-375.2	-67765.9	375926.0	42539450.0	-6706.0
200.168	-8016.0	92.5	14608.4	-101333.0	9167543.0	5580.0
200.169	-10046.7	-13.6	6848.8	-15304.0	16412660.0	3401.0
200.170	-1321.3	-97.6	-54896.1	115508.0	38024980.0	-6561.0
200.171	-3356.2	-191.8	-60014.7	193397.0	45269040.0	-8741.0
200.268	-2479.8	-102.2	-1206.7	187388.0	7424247.0	6390.0

200.269	-9253.7	-433.4	-26103.8	459773.0	31583720.0	-871.0
200.270	-390.3	94.3	-29443.8	-121408.0	17181040.0	1865.0
200.271	-7173.6	-236.4	-46381.7	155020.0	41321140.0	-5400.0
200.272	-3335.6	-88.7	8391.2	157525.0	10334260.0	4286.0
200.273	-10107.1	-420.6	-17947.3	423251.0	34497340.0	-2975.0
200.274	-1252.5	184.1	-23256.7	-219583.0	20082430.0	-236.0
200.275	-8034.0	-138.6	-40718.6	42109.0	44232980.0	-7501.0
200.276	-2447.5	57.6	-2635.1	-23341.0	7958437.0	5951.0
200.277	-9217.7	-275.0	-27600.8	249604.0	32122850.0	-1310.0
200.278	-429.6	-64.5	-21673.3	96829.0	16631080.0	2306.0
200.279	-7209.6	-408.8	-41265.2	389304.0	40782010.0	-4959.0
200.280	-3301.5	69.5	6833.2	-51558.0	10872910.0	3847.0
200.281	-10073.5	-260.3	-19520.3	212609.0	35035860.0	-3415.0
200.282	-1291.5	19.3	-15407.3	3799.0	19532540.0	205.0
200.283	-8073.2	-298.5	-33665.2	258938.0	43683040.0	-7061.0
200.284	-2479.7	-92.1	-5553.7	177179.0	7507272.0	6359.0
200.285	-9253.4	-422.9	-30441.0	448776.0	31663800.0	-901.0
200.286	-391.4	108.5	-30454.3	-139309.0	17260760.0	1834.0
200.287	-7173.0	-242.2	-47287.7	155874.0	41401280.0	-5431.0
200.288	-3335.5	-61.5	12065.3	130831.0	10254280.0	4317.0
200.289	-10108.7	-371.0	-14694.3	375928.0	34416940.0	-2943.0
200.290	-1254.5	226.6	-22448.5	-255208.0	20001920.0	-204.0
200.291	-8035.5	-98.2	-40050.7	7047.0	44142600.0	-7469.0
200.292	-2445.8	66.4	-7034.2	-32221.0	8044867.0	5920.0
200.293	-9218.3	-264.1	-31905.6	237737.0	32202700.0	-1341.0
200.294	-429.3	-57.0	-22769.7	88519.0	16711150.0	2275.0
200.295	-7208.9	-408.2	-43595.7	383160.0	40862180.0	-4990.0
200.296	-3301.6	100.0	10452.1	-81594.0	10792880.0	3878.0
200.297	-10074.8	-210.1	-16269.8	164272.0	34955540.0	-3383.0
200.298	-1293.5	61.9	-14586.0	-31299.0	19452030.0	237.0
200.299	-8073.5	-268.2	-32204.8	237672.0	43602960.0	-7028.0
251.1	1988.4	-57.2	-3035.6	94167.0	2079159.0	-2579.0
251.2	3071.2	-71.2	-3553.2	117536.0	5668703.0	-2025.0
251.3	2336.3	-102.2	-5505.2	176444.0	2630369.0	-7044.0
251.4	3419.0	-116.5	-6023.6	200126.0	6219888.0	-6490.0
251.5	1529.3	-43.7	-2335.7	71917.0	1596754.0	-1985.0
251.6	2612.1	-57.7	-2853.4	95268.0	5186298.0	-1430.0
251.7	1877.2	-88.8	-4805.4	154231.0	2147964.0	-6449.0
251.8	2960.0	-103.1	-5324.1	177927.0	5737508.0	-5895.0
251.9	4153.9	-85.1	-4071.9	140922.0	9259221.0	-1470.0
251.10	2231.9	-88.7	-4764.2	151744.0	2464898.0	-5705.0
251.11	4397.4	-116.9	-5801.7	198820.0	9643961.0	-4596.0
251.12	3694.9	-71.6	-3372.5	118709.0	8775842.0	-876.0
251.13	1772.9	-75.3	-4064.4	129515.0	1982519.0	-5110.0
251.14	3938.4	-103.3	-5102.0	176557.0	9161581.0	-4001.0
251.15	3314.7	-102.9	-5282.4	175281.0	6054442.0	-5150.0
251.16	2855.6	-89.4	-4582.8	153102.0	5572038.0	-4556.0
251.17	1501.3	-50.8	-2802.8	83748.0	464255.6	-2831.0
251.18	2584.1	-65.0	-3320.0	107215.0	4054199.0	-2277.0
251.19	1849.2	-95.9	-5272.0	166012.0	1015120.0	-7296.0
251.20	2932.0	-110.2	-5789.9	189679.0	4604409.0	-6742.0
251.21	1042.2	-37.3	-2102.9	61514.0	-18350.2	-2236.0
251.22	2125.0	-51.5	-2620.1	84943.0	3571794.0	-1682.0
251.23	1390.1	-82.4	-4572.4	143778.0	532499.9	-6701.0
251.24	2472.9	-96.8	-5090.2	167470.0	4122004.0	-6147.0
251.25	3666.8	-78.8	-3838.1	130519.0	7643717.0	-1722.0
251.26	1744.8	-82.3	-4531.2	141270.0	849871.0	-5957.0
251.27	3910.3	-110.6	-5567.8	188409.0	8029456.0	-4848.0
251.28	3207.8	-65.3	-3138.6	108304.0	7161338.0	-1128.0
251.29	1285.8	-68.9	-3831.3	119078.0	367287.6	-5362.0

251.30	3451.3	-97.1	-4868.3	166192.0	7546078.0	-4253.0
251.31	1176.6	-46.6	-2647.6	76837.0	-612504.0	-2999.0
251.32	2259.4	-60.8	-3164.6	100338.0	2976871.0	-2445.0
251.33	1420.1	-78.1	-4375.7	134341.0	-226875.7	-6125.0
251.34	2502.9	-92.3	-4893.3	157926.0	3362610.0	-5570.0
251.35	717.5	-33.0	-1947.7	54524.0	-1095078.0	-2404.0
251.36	1800.3	-47.3	-2464.7	78071.0	2494466.0	-1850.0
251.37	961.1	-64.7	-3675.8	112177.0	-709457.1	-5530.0
251.38	2043.8	-78.9	-4193.5	135730.0	2880206.0	-4975.0
251.39	2827.6	-96.6	-5048.9	164880.0	4439938.0	-5402.0
251.40	2368.5	-83.2	-4349.1	142691.0	3956533.0	-4807.0
251.41	2183.2	-59.7	-3128.8	98331.0	2725551.0	-2479.0
251.42	3266.0	-73.7	-3646.5	121667.0	6315094.0	-1924.0
251.43	2531.1	-104.9	-5598.5	180682.0	3276760.0	-6944.0
251.44	3613.9	-119.1	-6117.1	204300.0	6866305.0	-6389.0
251.45	1724.2	-46.2	-2428.9	76072.0	2243171.0	-1884.0
251.46	2806.9	-60.2	-2946.7	99393.0	5832690.0	-1329.0
251.47	2072.1	-91.4	-4898.7	158423.0	2793381.0	-6349.0
251.48	3154.8	-105.6	-5417.5	182079.0	6382900.0	-5794.0
251.49	4348.8	-87.5	-4165.4	145050.0	9904638.0	-1370.0
251.50	2426.8	-91.3	-4857.5	155922.0	3111315.0	-5604.0
251.51	4592.3	-119.4	-5895.2	202969.0	10290380.0	-4495.0
251.52	3889.7	-74.1	-3466.0	122868.0	9422234.0	-775.0
251.53	1967.7	-77.8	-4157.7	133713.0	2628910.0	-5009.0
251.54	4133.2	-105.8	-5195.5	180711.0	9807973.0	-3900.0
251.55	3509.5	-105.4	-5375.9	179448.0	6700834.0	-5050.0
251.56	3050.5	-91.9	-4676.3	157270.0	6218455.0	-4455.0
251.57	2313.1	-61.4	-3191.0	101106.0	3156487.0	-2411.0
251.58	3395.9	-75.3	-3708.8	124413.0	6746031.0	-1857.0
251.59	2556.7	-93.0	-4919.7	158697.0	3542251.0	-5537.0
251.60	3639.4	-107.0	-5438.3	182233.0	7131770.0	-4982.0
251.61	1854.1	-47.9	-2491.1	78846.0	2673107.0	-1817.0
251.62	2936.8	-61.8	-3009.0	102135.0	6263626.0	-1262.0
251.63	2097.6	-79.5	-4219.9	136509.0	3058847.0	-4942.0
251.64	3180.3	-93.6	-4738.7	160044.0	6648365.0	-4388.0
251.108	596.7	-114.3	-8051.8	459833.0	976130.3	1841.0
251.109	957.5	-149.3	-8869.6	504528.0	2021774.0	-165.0
251.110	1522.6	232.6	-8615.8	-18791.0	2803055.0	-2711.0
251.111	1882.7	196.6	-7819.2	23704.0	3846359.0	-4717.0
251.112	1457.5	-241.2	-7190.1	109873.0	-211077.9	-2835.0
251.113	1818.7	-274.7	-7187.3	153763.0	834668.4	-4842.0
251.114	2384.2	139.4	-10159.6	-363979.0	1612514.0	-7392.0
251.115	2744.7	105.9	-9365.0	-323691.0	2656919.0	-9398.0
251.116	664.3	14.3	-5314.3	291081.0	1102904.0	1155.0
251.117	1025.6	-16.7	-5981.3	330791.0	2150041.0	-851.0
251.118	1455.3	72.0	-5297.5	194675.0	2676992.0	-2023.0
251.119	1815.6	38.7	-6128.9	234749.0	3720345.0	-4030.0
251.120	1525.0	-111.1	-3773.6	-59193.0	-84503.2	-3521.0
251.121	1886.1	-145.1	-3771.0	-14638.0	961407.7	-5528.0
251.122	2314.5	-0.6	-5625.5	-182558.0	1482716.0	-6701.0
251.123	2674.9	-33.9	-4827.3	-142660.0	2527221.0	-8708.0
251.124	597.0	205.3	-10455.4	386640.0	1032115.0	1665.0
251.125	957.7	171.3	-11275.9	429764.0	2077825.0	-341.0
251.126	1522.6	550.7	-6184.6	-95117.0	2860055.0	-2885.0
251.127	1883.4	505.9	-5843.7	-39989.0	3905536.0	-4892.0
251.128	1458.1	-457.8	-5862.3	106798.0	-272605.8	-2662.0
251.129	1819.3	-491.4	-5860.6	151061.0	773424.5	-4669.0
251.130	2385.5	-83.5	-12667.8	-350341.0	1552498.0	-7220.0
251.131	2746.1	-116.8	-11875.1	-310021.0	2597274.0	-9227.0
251.132	665.0	338.9	-7533.6	211531.0	1161329.0	980.0

251.133	1026.2	308.3	-8250.9	249208.0	2207193.0	-1027.0
251.134	1455.3	406.1	-7718.0	99830.0	2732992.0	-2200.0
251.135	1815.7	372.2	-8552.4	140770.0	3777371.0	-4207.0
251.136	1527.7	-350.7	-5173.7	-28682.0	-140843.7	-3350.0
251.137	1888.1	-378.2	-3928.9	6005.0	903919.8	-5356.0
251.138	2316.3	-224.0	-8382.1	-168699.0	1423598.0	-6530.0
251.139	2676.5	-255.0	-7339.9	-131764.0	2467627.0	-8536.0
251.140	-181.8	-539.0	-23013.4	835457.0	-1576095.0	5502.0
251.141	179.2	-579.9	-23010.5	885088.9	-530290.8	3496.0
251.142	2913.3	614.5	-30419.3	-679249.0	4524667.0	-9686.0
251.143	3273.4	585.8	-29614.3	-643032.0	5567971.0	-11692.0
251.144	78.1	-596.7	-23167.3	745275.0	-1928198.0	4097.0
251.145	439.1	-637.7	-23164.5	795036.0	-881962.2	2091.0
251.146	3170.7	603.9	-30875.0	-794200.0	4165931.0	-11088.0
251.147	3530.8	575.2	-30070.1	-758019.0	5209235.0	-13094.0
251.148	-182.1	-440.3	-23410.3	811016.0	-1560172.0	5450.0
251.149	178.5	-474.9	-23407.9	855644.1	-514797.3	3445.0
251.150	2914.0	681.6	-29669.1	-684294.0	4544845.0	-9740.0
251.151	3273.9	653.0	-28863.6	-648004.0	5588098.0	-11745.0
251.152	78.7	-690.7	-22770.3	764545.0	-1944046.0	4148.0
251.153	439.9	-731.7	-22767.5	814093.0	-897463.4	2142.0
251.154	3170.5	536.1	-31626.8	-788807.0	4146880.0	-11035.0
251.155	3530.7	506.1	-30822.2	-751697.0	5190209.0	-13041.0
251.156	42.6	-111.5	-11627.2	275917.0	-1155199.0	3218.0
251.157	403.8	-152.5	-11624.3	325388.0	-109025.5	1211.0
251.158	2683.0	151.1	-15334.6	-79063.0	4092275.0	-7390.0
251.159	3042.9	122.1	-14530.9	-42336.0	5134528.0	-9395.0
251.160	302.8	-169.4	-11781.3	186267.0	-1507225.0	1811.0
251.161	664.1	-210.4	-11778.5	235740.0	-460206.4	-195.0
251.162	2940.4	140.3	-15789.4	-194825.0	3732538.0	-8791.0
251.163	3300.3	111.6	-14983.8	-158496.0	4775791.0	-10797.0
251.164	41.8	-10.6	-12024.0	249451.0	-1140402.0	3167.0
251.165	402.7	-45.4	-12021.7	294071.0	-94264.4	1160.0
251.166	2683.4	218.4	-14583.8	-83327.0	4110376.0	-7443.0
251.167	3043.4	188.0	-13790.8	-44499.0	5153654.0	-9449.0
251.168	304.1	-263.4	-11384.7	205519.0	-1521895.0	1861.0
251.169	665.3	-304.4	-11381.9	254993.0	-475024.2	-146.0
251.170	2939.5	73.1	-16538.5	-190021.0	3712310.0	-8737.0
251.171	3299.6	44.2	-15733.5	-153650.0	4755614.0	-10743.0
251.268	475.5	-129.1	-6861.6	286150.0	-661014.9	2547.0
251.269	1678.3	-251.4	-8013.7	444147.0	2824533.0	-4140.0
251.270	1404.8	200.3	-10106.0	-157468.0	1172376.0	-2010.0
251.271	2604.9	93.5	-7437.1	-26796.0	4650473.0	-8696.0
251.272	734.2	-182.7	-7016.1	194611.0	-1015844.0	1144.0
251.273	1937.9	-307.0	-7008.3	349633.0	2471355.0	-5545.0
251.274	1662.2	183.5	-10564.3	-268130.0	812977.8	-3412.0
251.275	2863.0	74.3	-7887.1	-136295.0	4291914.0	-10100.0
251.276	542.5	-0.3	-3446.3	118002.0	-535494.1	1862.0
251.277	1746.5	-118.5	-5154.5	269241.0	2952825.0	-4826.0
251.278	1335.5	64.2	-5580.9	20703.0	1041824.0	-1320.0
251.279	2536.8	-51.5	-5573.5	164027.0	4522206.0	-8009.0
251.280	801.8	-54.5	-3600.4	26920.0	-888703.6	458.0
251.281	2005.3	-175.8	-3924.6	178950.0	2597444.0	-6231.0
251.282	1592.9	43.9	-6037.9	-87811.0	682779.8	-2722.0
251.283	2793.4	-59.9	-4347.4	38187.0	4161267.0	-9410.0
251.284	475.4	-32.3	-7259.9	263083.0	-644214.3	2494.0
251.285	1678.3	-155.4	-8746.5	421903.0	2841533.0	-4192.0
251.286	1404.1	298.3	-9343.3	-186147.0	1188443.0	-2061.0
251.287	2604.7	178.0	-6687.2	-43868.0	4667422.0	-8749.0
251.288	734.8	-259.9	-6618.6	202274.0	-1032691.0	1195.0



251.289	1938.2	-372.2	-6609.2	349316.0	2453431.0	-5494.0
251.290	1662.4	120.0	-11313.8	-267249.0	794568.5	-3360.0
251.291	2863.4	7.3	-8639.8	-132348.0	4274015.0	-10048.0
251.292	542.9	96.3	-3845.9	94779.0	-517492.7	1809.0
251.293	1746.3	-22.8	-5939.0	246952.0	2968775.0	-4879.0
251.294	1335.2	156.8	-4853.5	-469.0	1058961.0	-1372.0
251.295	2536.7	37.3	-6298.4	144444.0	4539181.0	-8062.0
251.296	802.3	-129.9	-3202.8	33234.0	-905576.9	509.0
251.297	2005.6	-241.2	-3353.7	178973.0	2579520.0	-6179.0
251.298	1593.0	-19.2	-6786.9	-87092.0	664360.1	-2670.0
251.299	2794.0	-135.2	-4131.5	52013.0	4144419.0	-9358.0
252.1	1977.1	56.0	-3142.2	-92238.0	2073294.0	2588.0
252.2	3057.0	69.0	-3676.4	-114912.0	5666103.0	2050.0
252.3	2317.2	102.4	-5656.5	-176127.0	2616526.0	7050.0
252.4	3397.2	115.1	-6190.6	-198561.0	6209360.0	6512.0
252.5	1520.7	42.8	-2417.8	-70526.0	1592574.0	1991.0
252.6	2600.7	55.9	-2951.9	-93237.0	5184408.0	1453.0
252.7	1860.8	89.2	-4932.0	-154377.0	2135806.0	6454.0
252.8	2940.8	102.0	-5466.0	-176858.0	5728640.0	5915.0
252.9	4137.0	82.3	-4210.2	-137718.0	9258937.0	1512.0
252.10	2215.2	88.5	-4902.3	-150984.0	2453664.0	5712.0
252.11	4375.2	114.5	-5970.1	-196284.0	9639332.0	4635.0
252.12	3680.6	69.2	-3485.8	-116060.0	8777216.0	915.0
252.13	1758.8	75.3	-4177.9	-129247.0	1972944.0	5115.0
252.14	3918.8	101.5	-5245.9	-174670.0	9157612.0	4039.0
252.15	3295.1	101.3	-5436.3	-173503.0	6046473.0	5173.0
252.16	2838.8	88.2	-4711.8	-151785.0	5564778.0	4577.0
252.17	1491.2	50.3	-2901.8	-82371.0	456926.8	2833.0
252.18	2571.2	63.1	-3436.0	-104868.0	4049928.0	2295.0
252.19	1831.4	96.7	-5416.1	-166242.0	1000501.0	7295.0
252.20	2911.3	109.4	-5950.3	-188600.0	4593160.0	6757.0
252.21	1034.8	37.2	-2177.4	-60657.0	-24303.5	2236.0
252.22	2114.8	50.0	-2711.6	-83186.0	3568208.0	1698.0
252.23	1375.0	83.6	-4691.7	-144527.0	519282.2	6698.0
252.24	2454.9	96.2	-5225.8	-166867.0	4111440.0	6160.0
252.25	3651.2	76.4	-3970.0	-127686.0	7641762.0	1756.0
252.26	1729.3	82.9	-4661.9	-141129.0	837399.0	5956.0
252.27	3889.3	108.7	-5729.8	-186228.0	8022132.0	4880.0
252.28	3194.8	63.3	-3245.5	-105996.0	7161042.0	1160.0
252.29	1272.9	69.6	-3937.4	-119358.0	356172.8	5360.0
252.30	3432.9	95.6	-5005.4	-164555.0	7541412.0	4283.0
252.31	1167.3	46.5	-2741.6	-75785.0	-620705.1	2996.0
252.32	2247.3	59.2	-3275.8	-98179.0	2971803.0	2458.0
252.33	1405.4	79.0	-4501.6	-134515.0	-240244.8	6119.0
252.34	2485.4	91.7	-5035.8	-156915.0	3352173.0	5581.0
252.35	710.9	33.5	-2017.3	-54144.0	-1101751.0	2399.0
252.36	1790.9	46.1	-2551.3	-76485.0	2491083.0	1861.0
252.37	949.0	65.8	-3777.2	-112721.0	-721473.1	5523.0
252.38	2029.0	78.5	-4311.3	-135149.0	2871453.0	4985.0
252.39	2809.3	95.5	-5196.0	-163520.0	4430298.0	5418.0
252.40	2352.9	82.3	-4471.6	-141760.0	3948578.0	4821.0
252.41	2171.4	58.3	-3238.4	-96199.0	2719559.0	2490.0
252.42	3251.4	71.4	-3772.5	-118934.0	6312393.0	1952.0
252.43	2511.6	104.6	-5752.7	-180031.0	3263816.0	6952.0
252.44	3591.5	117.5	-6286.7	-202570.0	6856625.0	6414.0
252.45	1715.0	45.1	-2514.0	-74494.0	2238838.0	1893.0
252.46	2795.0	58.3	-3048.0	-97268.0	5831673.0	1355.0
252.47	2055.2	91.5	-5028.1	-158326.0	2782096.0	6356.0
252.48	3135.1	104.4	-5562.2	-180886.0	6374905.0	5817.0
252.49	4331.4	84.6	-4306.4	-141766.0	9905227.0	1414.0

252.50	2409.5	90.7	-4998.5	-154935.0	3100929.0	5614.0
252.51	4569.5	116.9	-6066.3	-200328.0	10285600.0	4537.0
252.52	3875.0	71.5	-3581.9	-120084.0	9423506.0	817.0
252.53	1953.1	77.6	-4273.9	-133178.0	2619209.0	5017.0
252.54	4113.1	103.9	-5342.0	-178705.0	9804877.0	3941.0
252.55	3489.5	103.7	-5532.4	-177514.0	6692763.0	5075.0
252.56	3033.1	90.5	-4807.9	-155802.0	6212043.0	4479.0
252.57	2301.0	59.8	-3302.5	-98842.0	3151419.0	2425.0
252.58	3381.0	72.9	-3836.6	-121622.0	6743253.0	1887.0
252.59	2539.1	92.3	-5062.6	-157578.0	3531789.0	5548.0
252.60	3619.1	105.2	-5596.5	-180186.0	7124623.0	5010.0
252.61	1844.6	46.6	-2578.1	-77140.0	2669699.0	1828.0
252.62	2924.6	59.9	-3112.1	-99961.0	6262533.0	1290.0
252.63	2082.7	79.1	-4338.0	-135807.0	3050069.0	4952.0
252.64	3162.7	92.1	-4872.0	-158484.0	6642903.0	4414.0
252.108	1537.1	278.8	-3546.6	-82311.0	-186290.3	3510.0
252.109	1895.8	311.9	-3516.4	-126233.0	822839.1	5511.0
252.110	2317.3	77.3	-5713.2	116095.0	1367516.0	6678.0
252.111	2675.9	110.6	-4975.1	75505.0	2376475.0	8680.0
252.112	644.8	114.2	-5517.8	-376346.0	1253489.0	-1108.0
252.113	1004.1	150.0	-6211.1	-421156.0	2263590.0	894.0
252.114	1429.2	5.4	-5746.1	-247274.0	2818374.0	2061.0
252.115	1787.5	43.5	-6596.2	-292279.0	3826221.0	4063.0
252.116	1469.5	410.3	-6999.0	-251949.0	-312046.3	2827.0
252.117	1828.2	442.5	-6969.1	-294245.0	696877.1	4828.0
252.118	2387.2	-62.3	-10277.2	297494.0	1496958.0	7366.0
252.119	2745.8	-28.9	-9539.9	256524.0	2505198.0	9368.0
252.120	577.2	246.7	-8269.4	-547844.0	1127842.0	-1791.0
252.121	936.0	286.9	-9109.8	-598141.0	2137323.0	211.0
252.122	1496.5	-156.9	-8419.9	-35038.0	2943438.0	2746.0
252.123	1854.6	-115.8	-7676.9	-82932.0	3951234.0	4747.0
252.124	1526.3	649.8	-5069.1	-179852.0	-36586.6	3339.0
252.125	1884.7	683.7	-3493.7	-223710.0	971970.7	5340.0
252.126	2304.8	437.0	-8847.9	32453.0	1514210.0	6504.0
252.127	2663.6	469.4	-8111.0	-7088.0	2522356.0	8506.0
252.128	665.8	-93.7	-7873.2	-423575.0	1124118.0	-922.0
252.129	1024.3	-55.0	-8743.6	-469862.0	2131711.0	1080.0
252.130	1449.9	-204.3	-8461.1	-289510.0	2686622.0	2250.0
252.131	1808.2	-166.4	-9305.8	-334121.0	3694469.0	4252.0
252.132	1457.0	768.3	-5159.0	-329185.0	-166124.7	2654.0
252.133	1815.9	801.5	-5129.2	-373359.0	842757.4	4656.0
252.134	2374.7	298.2	-13413.1	212007.0	1643105.0	7192.0
252.135	2733.4	331.1	-12675.8	171339.0	2652054.0	9195.0
252.136	597.7	44.8	-10838.5	-601978.0	995542.9	-1604.0
252.137	956.0	84.9	-11694.3	-652094.0	2004394.0	396.0
252.138	1517.3	-343.2	-5735.8	-105115.0	2812711.0	2932.0
252.139	1875.6	-304.8	-6587.0	-150572.0	3820558.0	4934.0
252.140	315.0	409.1	-11560.9	-375961.0	-1503132.0	-1787.0
252.141	673.5	437.2	-11530.3	-416383.0	-494080.1	214.0
252.142	2923.7	-144.0	-15598.5	192056.0	3692304.0	8778.0
252.143	3282.0	-101.0	-14848.5	143527.0	4701151.0	10780.0
252.144	45.7	326.4	-11522.4	-432443.0	-1075413.0	-3174.0
252.145	404.2	354.4	-11491.8	-472772.0	-66706.1	-1173.0
252.146	2657.6	-142.8	-15043.4	67781.0	4128835.0	7393.0
252.147	3015.9	-99.3	-14296.9	18562.0	5137681.0	9395.0
252.148	311.2	518.3	-11008.9	-400808.0	-1458095.0	-1839.0
252.149	670.0	552.0	-10978.3	-445482.0	-449313.5	162.0
252.150	2917.5	-82.3	-16531.2	204687.0	3731732.0	8722.0
252.151	3276.0	-39.2	-15781.7	156261.0	4739630.0	10724.0
252.152	49.9	218.2	-12074.3	-407470.0	-1119348.0	-3120.0

252.153	408.2	246.4	-12043.6	-448066.0	-110695.9	-1120.0
252.154	2663.2	-204.9	-14111.0	54784.0	4089254.0	7449.0
252.155	3021.7	-160.6	-13376.1	3876.0	5097152.0	9450.0
252.156	90.3	844.4	-23068.7	-939738.9	-1920105.0	-4063.0
252.157	448.5	872.6	-23038.0	-980443.0	-912282.8	-2063.0
252.158	3153.8	-618.4	-30791.8	799310.0	4121646.0	11066.0
252.159	3512.3	-575.4	-30042.5	750932.0	5130544.0	13068.0
252.160	-179.1	760.7	-23030.4	-996184.0	-1493411.0	-5449.0
252.161	179.1	789.0	-22999.7	-1037000.0	-485547.2	-3449.0
252.162	2887.5	-617.0	-30235.3	675748.0	4558126.0	9680.0
252.163	3246.0	-574.0	-29485.9	627351.0	5567024.0	11682.0
252.164	86.8	956.6	-22516.6	-966266.0	-1874992.0	-4115.0
252.165	445.2	990.1	-22485.9	-1011000.0	-866674.5	-2114.0
252.166	3148.1	-556.7	-31726.6	811645.0	4162201.0	11011.0
252.167	3506.7	-513.7	-30977.5	763382.0	5170124.0	13013.0
252.168	-175.5	652.0	-23582.2	-971759.9	-1538498.0	-5397.0
252.169	182.7	680.2	-23551.5	-1012000.0	-530673.4	-3397.0
252.170	2893.8	-678.7	-29302.7	663569.0	4519723.0	9736.0
252.171	3252.1	-635.8	-28552.6	615141.0	5528570.0	11738.0
252.268	804.1	143.8	-3538.0	-99457.0	-863120.4	-445.0
252.269	1999.7	253.6	-3847.2	-244532.0	2500024.0	6226.0
252.270	1585.6	-54.4	-5932.9	95840.0	692900.9	2723.0
252.271	2780.3	72.4	-4372.5	-51344.0	4053945.0	9396.0
252.272	535.4	66.6	-3500.2	-160467.0	-433835.3	-1830.0
252.273	1731.6	181.5	-5249.0	-313895.0	2931047.0	4840.0
252.274	1319.5	-64.5	-5383.7	-18997.0	1129287.0	1339.0
252.275	2514.7	75.6	-5852.5	-184600.0	4490603.0	8012.0
252.276	737.0	275.3	-6990.3	-268870.0	-988133.7	-1127.0
252.277	1932.3	386.8	-6890.3	-416855.0	2374935.0	5543.0
252.278	1654.9	-192.3	-10491.7	274326.0	822424.9	3410.0
252.279	2849.7	-67.5	-7999.7	128283.0	4182542.0	10083.0
252.280	467.8	196.6	-6952.3	-329650.0	-559756.3	-2513.0
252.281	1663.5	318.2	-8111.8	-491292.0	2803781.0	4156.0
252.282	1388.6	-207.7	-9937.1	164696.0	1258427.0	2025.0
252.283	2582.7	-70.3	-7446.1	5922.0	4617844.0	8697.0
252.284	800.3	251.2	-2986.6	-122592.0	-819083.9	-496.0
252.285	1996.1	361.1	-3174.7	-268196.0	2544111.0	6175.0
252.286	1581.4	51.6	-6865.6	71746.0	736443.0	2670.0
252.287	2775.7	166.1	-4400.0	-67680.0	4095779.0	9342.0
252.288	540.4	-14.8	-4050.6	-159047.0	-475799.6	-1776.0
252.289	1737.3	121.2	-6082.7	-329915.0	2890493.0	4896.0
252.290	1325.7	-121.2	-4480.9	-37971.0	1090056.0	1395.0
252.291	2520.9	12.7	-6668.0	-197789.0	4451174.0	8069.0
252.292	732.7	383.1	-6438.2	-292838.0	-945223.9	-1180.0
252.293	1928.7	494.5	-6337.1	-440598.0	2418022.0	5492.0
252.294	1650.6	-86.9	-11420.9	251129.0	865472.6	3357.0
252.295	2845.3	25.0	-8943.8	115395.0	4225426.0	10030.0
252.296	472.9	118.0	-7502.0	-330519.0	-601450.2	-2459.0
252.297	1669.4	257.7	-8898.5	-507702.0	2764276.0	4212.0
252.298	1394.5	-268.2	-9003.9	151392.0	1218485.0	2081.0
252.299	2588.6	-132.7	-6523.9	-6624.0	4578340.0	8752.0
253.1	1514.7	26.8	-177.8	-23876.0	-460976.8	2042.0
253.2	2113.6	29.7	-173.8	-26226.0	-291884.7	3745.0
253.3	1985.4	53.1	-184.9	-46295.0	606842.1	2203.0
253.4	2584.2	55.3	-195.9	-47828.0	775877.9	3906.0
253.5	1164.7	20.6	-141.4	-18396.0	-357951.3	1570.0
253.6	1763.6	23.6	-138.2	-20767.0	-188863.3	3273.0
253.7	1635.4	46.8	-148.6	-40713.0	709863.7	1731.0
253.8	2234.3	49.0	-165.3	-42157.0	878910.8	3434.0
253.9	2712.5	32.4	-190.2	-28103.0	-122841.6	5447.0

253.10	1844.2	45.3	-180.8	-39674.0	286516.9	2155.0
253.11	3041.9	50.2	-214.0	-42944.0	624557.8	5560.0
253.12	2362.5	26.1	-158.0	-22400.0	-19828.1	4975.0
253.13	1494.2	39.1	-144.4	-34126.0	389537.4	1683.0
253.14	2691.9	43.9	-183.3	-37347.0	727575.3	5088.0
253.15	2443.0	47.8	-190.2	-41439.0	455547.7	3857.0
253.16	2093.1	41.5	-156.7	-35797.0	558584.5	3385.0
253.17	1245.0	25.6	-182.6	-22804.0	-535789.3	1275.0
253.18	1843.9	28.4	-172.1	-25154.0	-366670.2	2978.0
253.19	1715.7	52.0	-182.3	-45386.0	532054.8	1436.0
253.20	2314.6	54.3	-185.5	-47117.0	701130.9	3139.0
253.21	895.0	19.4	-146.6	-17279.0	-432762.8	803.0
253.22	1494.0	22.3	-135.5	-19719.0	-263621.3	2506.0
253.23	1365.7	45.7	-151.1	-39696.0	635069.3	964.0
253.24	1964.6	48.0	-151.9	-41489.0	804148.3	2667.0
253.25	2442.8	31.3	-177.4	-27368.0	-197611.1	4680.0
253.26	1574.5	44.2	-179.8	-38839.0	211722.5	1388.0
253.27	2772.3	49.1	-200.6	-42262.0	549822.7	4793.0
253.28	2092.8	25.1	-146.9	-21756.0	-94596.5	4208.0
253.29	1224.5	37.9	-142.3	-33242.0	314746.0	916.0
253.30	2422.3	42.8	-169.9	-36613.0	652833.1	4321.0
253.31	1065.2	24.7	-185.8	-22017.0	-585658.6	764.0
253.32	1664.2	27.5	-172.0	-24408.0	-416506.1	2466.0
253.33	1394.7	43.5	-177.4	-38226.0	161866.2	877.0
253.34	1993.6	45.9	-177.1	-40107.0	330947.3	2579.0
253.35	715.2	18.5	-151.8	-16562.0	-482637.0	292.0
253.36	1314.2	21.3	-135.3	-18961.0	-313481.6	1994.0
253.37	1044.8	37.1	-139.2	-32600.0	264917.9	405.0
253.38	1643.7	39.6	-141.0	-34529.0	433991.1	2107.0
253.39	2173.4	46.6	-182.1	-40613.0	380799.6	3090.0
253.40	1823.4	40.3	-146.1	-35026.0	483821.0	2618.0
253.41	1622.5	27.3	-178.0	-24263.0	-431076.2	2349.0
253.42	2221.4	30.2	-175.2	-26631.0	-261993.0	4051.0
253.43	2093.2	53.5	-185.0	-46564.0	636740.9	2510.0
253.44	2692.1	55.8	-201.1	-48103.0	805784.9	4212.0
253.45	1272.6	21.1	-141.6	-18798.0	-328024.3	1877.0
253.46	1871.5	24.1	-140.5	-21160.0	-158947.2	3580.0
253.47	1743.2	47.2	-151.1	-41010.0	739756.4	2038.0
253.48	2342.1	49.5	-170.8	-42475.0	908796.5	3741.0
253.49	2820.3	32.9	-196.2	-28433.0	-92950.0	5754.0
253.50	1952.0	45.7	-181.8	-40009.0	316411.6	2462.0
253.51	3149.8	50.6	-218.8	-43241.0	654470.8	5867.0
253.52	2470.3	26.5	-162.2	-22694.0	10062.6	5282.0
253.53	1602.0	39.5	-145.4	-34454.0	419430.1	1990.0
253.54	2799.8	44.4	-187.8	-37623.0	757489.3	5395.0
253.55	2550.9	48.2	-194.7	-41735.0	485455.7	4164.0
253.56	2200.9	41.9	-161.8	-36081.0	588467.2	3692.0
253.57	1694.5	27.6	-178.6	-24512.0	-411108.5	2553.0
253.58	2293.4	30.6	-176.7	-26896.0	-242031.5	4256.0
253.59	2023.9	46.0	-183.1	-40234.0	336348.8	2666.0
253.60	2622.8	48.5	-198.1	-41914.0	505385.9	4369.0
253.61	1344.5	21.4	-142.2	-19052.0	-308083.0	2082.0
253.62	1943.4	24.4	-143.9	-21388.0	-139013.9	3784.0
253.63	1674.0	39.7	-146.8	-34654.0	439392.7	2194.0
253.64	2272.8	42.2	-165.2	-36279.0	608398.4	3897.0
253.108	390.6	328.2	4150.6	-184528.0	-457348.4	-4152.0
253.109	731.7	339.7	4048.3	-198519.0	553866.5	-1190.0
253.110	1301.2	46.5	4342.2	170476.0	1231525.0	-822.0
253.111	1641.5	57.4	4660.6	156652.0	2241202.0	2139.0
253.112	1067.0	59.7	-11648.1	-247053.0	-2098462.0	1140.0

253.113	1408.5	83.8	-11473.3	-277051.0	-1086875.0	4103.0
253.114	1977.9	-29.5	-13625.4	-113616.0	-410813.4	4476.0
253.115	2318.7	-7.4	-12584.1	-140224.0	599547.4	7437.0
253.116	497.7	356.1	5282.4	-214176.0	-314793.2	-4142.0
253.117	839.4	364.6	5198.4	-223825.0	697841.9	-1179.0
253.118	1194.0	12.9	3120.4	215904.0	1089413.0	-830.0
253.119	1534.6	24.1	3425.7	201387.0	2099098.0	2131.0
253.120	1174.0	88.6	-13367.1	-276497.0	-1956332.0	1150.0
253.121	1515.5	111.6	-13168.6	-304589.0	-943744.9	4112.0
253.122	1868.4	-67.9	-12251.0	-65276.0	-557267.2	4462.0
253.123	2209.2	-45.6	-11281.5	-92584.0	453067.7	7423.0
253.124	408.8	637.0	4945.1	-511553.0	-369752.8	-4116.0
253.125	749.8	648.8	4815.5	-526636.0	641465.8	-1155.0
253.126	1319.3	389.6	7974.4	-202990.0	1319839.0	-788.0
253.127	1660.4	396.9	7806.4	-211949.0	2330994.0	2174.0
253.128	1048.2	-69.6	-20820.1	-92630.0	-2189229.0	1115.0
253.129	1389.9	-46.7	-20566.3	-119737.0	-1176591.0	4078.0
253.130	1960.0	-180.6	-26403.5	71586.0	-500161.0	4452.0
253.131	2300.9	-158.4	-25307.9	45095.0	510393.2	7413.0
253.132	516.6	660.2	6060.7	-535252.0	-225229.0	-4107.0
253.133	858.2	670.6	5911.0	-548433.0	786885.6	-1144.0
253.134	1212.2	358.5	7252.3	-162116.0	1177204.0	-797.0
253.135	1552.9	368.0	7037.1	-174448.0	2186738.0	2165.0
253.136	1157.7	-45.2	-22444.4	-115722.0	-2041465.0	1128.0
253.137	1498.5	-21.1	-22208.5	-145214.0	-1031055.0	4089.0
253.138	1851.0	-214.5	-24997.1	112318.0	-645678.9	4440.0
253.139	2191.6	-191.7	-23965.9	84736.0	364286.2	7401.0
253.140	-435.0	476.8	-4257.4	-528763.0	-3006294.0	-6189.0
253.141	-93.6	483.5	-4267.7	-539647.0	-1993732.0	-3226.0
253.142	2609.3	-207.4	-8876.1	361102.0	2638588.0	4932.0
253.143	2949.7	-183.9	-8356.1	334273.0	3647897.0	7893.0
253.144	-229.9	358.0	-7767.0	-506861.0	-3494291.0	-4601.0
253.145	111.5	364.6	-7775.8	-517660.0	-2481729.0	-1639.0
253.146	2811.0	-191.5	-14819.4	235747.0	2142729.0	6521.0
253.147	3151.4	-167.9	-14299.5	208800.0	3153038.0	9482.0
253.148	-430.0	571.3	-4048.2	-628594.0	-2980027.0	-6179.0
253.149	-88.9	583.8	-4134.5	-643756.0	-1969541.0	-3217.0
253.150	2615.9	-163.3	-5429.1	307995.0	2667262.0	4941.0
253.151	2956.1	-141.1	-4834.8	283069.0	3676519.0	7901.0
253.152	-234.7	259.0	-8448.6	-399006.0	-3519508.0	-4610.0
253.153	106.9	267.5	-8299.4	-412410.0	-2506896.0	-1648.0
253.154	2805.0	-232.2	-18706.5	283788.0	2115208.0	6513.0
253.155	3145.5	-209.2	-18110.6	256968.0	3124542.0	9474.0
253.156	-79.1	560.7	-4749.9	-614780.0	-2533056.0	-6155.0
253.157	262.7	569.9	-4598.7	-629263.0	-1520392.0	-3193.0
253.158	2246.1	-317.2	-10137.0	499572.0	2152499.0	4895.0
253.159	2586.2	-295.5	-9573.6	475415.0	3160731.0	7855.0
253.160	126.4	443.2	-11301.0	-593852.0	-3019951.0	-4567.0
253.161	468.1	452.4	-11149.7	-608333.0	-2007313.0	-1605.0
253.162	2447.8	-300.6	-12193.0	371624.0	1657640.0	6484.0
253.163	2787.9	-278.9	-11628.6	347399.0	2665872.0	9444.0
253.164	-74.6	656.4	-1949.9	-715695.0	-2507915.0	-6145.0
253.165	266.8	671.2	-1946.5	-734352.0	-1496353.0	-3183.0
253.166	2252.2	-276.8	-9445.9	452831.0	2180045.0	4903.0
253.167	2592.4	-255.3	-8887.6	429040.0	3189303.0	7864.0
253.168	122.4	349.4	-14122.1	-492637.0	-3043966.0	-4576.0
253.169	464.2	358.7	-13970.9	-507119.0	-2031302.0	-1614.0
253.170	2441.0	-346.3	-13879.1	426332.0	1627916.0	6475.0
253.171	2781.3	-323.0	-13350.3	399705.0	2637199.0	9436.0
253.268	227.8	185.8	110.9	-158701.0	-2214241.0	-5760.0



253.269	1365.2	224.3	-170.8	-204976.0	1157559.0	4114.0
253.270	1142.2	-64.4	-1465.0	156588.0	-518155.2	-2424.0
253.271	2276.5	-9.4	-54.1	93483.0	2846207.0	7445.0
253.272	431.4	70.8	-4138.7	-138642.0	-2704619.0	-4173.0
253.273	1569.9	124.6	-3537.3	-210459.0	668563.1	5703.0
253.274	1343.9	-67.2	-7503.6	52154.0	-1013254.0	-835.0
253.275	2479.0	3.9	-4921.7	-33658.0	2352551.0	9034.0
253.276	334.2	209.6	798.3	-182392.0	-2073264.0	-5750.0
253.277	1473.1	251.8	881.1	-234431.0	1301605.0	4125.0
253.278	1032.9	-93.3	-2551.5	194914.0	-664656.3	-2435.0
253.279	2168.5	-44.0	-1340.8	137215.0	2701823.0	7435.0
253.280	538.5	97.9	-5850.3	-166587.0	-2562463.0	-4163.0
253.281	1676.8	155.3	-5311.5	-242512.0	810751.6	5712.0
253.282	1234.7	-101.8	-6013.4	94966.0	-1159942.0	-847.0
253.283	2369.6	-29.8	-3591.4	7896.0	2205812.0	9022.0
253.284	233.2	278.2	346.4	-256496.0	-2187872.0	-5750.0
253.285	1370.7	316.8	53.0	-303252.0	1183930.0	4124.0
253.286	1147.0	30.8	721.1	53851.0	-492877.2	-2415.0
253.287	2281.9	65.8	1447.5	10245.0	2872576.0	7454.0
253.288	426.4	8.7	-6902.1	-68964.0	-2730886.0	-4181.0
253.289	1564.4	85.8	-6259.1	-163513.0	641537.6	5695.0
253.290	1338.3	-109.1	-11581.8	103730.0	-1040674.0	-843.0
253.291	2473.5	-40.9	-8741.2	20728.0	2325156.0	9027.0
253.292	340.2	306.4	1489.2	-286560.0	-2045742.0	-5740.0
253.293	1478.2	344.1	1143.0	-332731.0	1327231.0	4135.0
253.294	1038.2	-0.3	-478.1	95429.0	-638322.4	-2426.0
253.295	2174.0	36.9	308.1	48348.0	2728218.0	7444.0
253.296	533.5	39.3	-8599.8	-100519.0	-2588731.0	-4171.0
253.297	1671.3	116.3	-8021.2	-195470.0	783984.1	5704.0
253.298	1229.0	-143.8	-10132.3	147202.0	-1186387.0	-854.0
253.299	2364.5	-76.1	-7358.7	63631.0	2180519.0	9015.0
254.1	-853.7	-85.2	-2906.8	118517.0	-7627456.0	-4262.0
254.2	-1318.4	-103.8	-3401.5	148128.0	-11964280.0	-3503.0
254.3	-1362.3	-156.0	-5258.1	226703.0	-8446411.0	-8747.0
254.4	-1827.0	-174.9	-5754.4	256604.0	-12783240.0	-7988.0
254.5	-656.5	-65.1	-2236.6	90222.0	-5865456.0	-3278.0
254.6	-1121.2	-83.6	-2731.4	119811.0	-10203280.0	-2519.0
254.7	-1165.0	-135.9	-4588.0	198441.0	-6683386.0	-7762.0
254.8	-1629.8	-154.8	-5084.9	228343.0	-11023240.0	-7004.0
254.9	-1783.2	-122.3	-3897.9	177710.0	-16302130.0	-2745.0
254.10	-1209.7	-134.8	-4552.5	194240.0	-8200720.0	-7401.0
254.11	-2139.2	-172.1	-5545.9	253709.0	-16882390.0	-5884.0
254.12	-1585.9	-102.1	-3228.4	149439.0	-14542110.0	-1760.0
254.13	-1012.5	-114.6	-3882.4	165964.0	-6437720.0	-6417.0
254.14	-1942.0	-151.9	-4876.0	225393.0	-15112390.0	-4900.0
254.15	-1674.4	-153.5	-5048.2	223999.0	-12534540.0	-6642.0
254.16	-1477.2	-133.4	-4378.7	195760.0	-10774540.0	-5658.0
254.17	-646.6	-76.7	-2684.1	105345.0	-5675946.0	-4609.0
254.18	-1111.4	-95.6	-3178.3	135079.0	-10014800.0	-3850.0
254.19	-1155.2	-147.6	-5034.8	213537.0	-6494901.0	-9093.0
254.20	-1620.0	-166.5	-5530.4	243439.0	-10830750.0	-8334.0
254.21	-449.4	-56.6	-2014.0	77069.0	-3913945.0	-3624.0
254.22	-914.2	-75.4	-2508.2	106760.0	-8252796.0	-2866.0
254.23	-958.0	-127.4	-4365.0	185251.0	-4731901.0	-8109.0
254.24	-1422.7	-146.4	-4860.6	215179.0	-9070726.0	-7350.0
254.25	-1576.1	-114.0	-3673.8	164597.0	-14349620.0	-3091.0
254.26	-1002.6	-126.3	-4329.2	181028.0	-6249210.0	-7748.0
254.27	-1932.1	-163.8	-5321.6	240591.0	-14929880.0	-6230.0
254.28	-1378.9	-93.8	-3004.2	136324.0	-12589620.0	-2107.0
254.29	-805.4	-106.2	-3659.2	152791.0	-4487209.0	-6763.0

254.30	-1734.9	-143.6	-4652.0	212315.0	-13159880.0	-5246.0
254.31	-508.6	-71.1	-2535.7	96606.0	-4375956.0	-4840.0
254.32	-973.4	-90.0	-3029.7	126378.0	-8713805.0	-4081.0
254.33	-864.6	-120.7	-4180.4	172280.0	-4948219.0	-7979.0
254.34	-1329.4	-139.6	-4675.5	202103.0	-9287070.0	-7220.0
254.35	-311.4	-50.9	-1865.4	68252.0	-2612956.0	-3855.0
254.36	-776.1	-69.8	-2359.5	98066.0	-6951781.0	-3097.0
254.37	-667.4	-100.6	-3510.5	144072.0	-3186219.0	-6994.0
254.38	-1132.1	-119.5	-4005.7	173857.0	-7524044.0	-6236.0
254.39	-1467.4	-145.2	-4824.5	210875.0	-10592060.0	-6989.0
254.40	-1270.2	-125.1	-4154.7	182638.0	-8825059.0	-6005.0
254.41	-936.5	-88.6	-2996.0	123779.0	-8408449.0	-4124.0
254.42	-1401.3	-107.1	-3490.8	153349.0	-12745300.0	-3365.0
254.43	-1445.1	-159.5	-5347.5	232035.0	-9227405.0	-8608.0
254.44	-1909.8	-178.2	-5844.2	261859.0	-13564230.0	-7849.0
254.45	-739.3	-68.4	-2325.8	95476.0	-6645449.0	-3139.0
254.46	-1204.0	-87.0	-2820.7	125026.0	-10985270.0	-2381.0
254.47	-1247.9	-139.3	-4677.5	203725.0	-7464405.0	-7624.0
254.48	-1712.6	-158.1	-5174.5	233579.0	-11804230.0	-6865.0
254.49	-1866.0	-125.6	-3987.4	182926.0	-17083120.0	-2606.0
254.50	-1292.5	-138.1	-4641.8	199513.0	-8981713.0	-7263.0
254.51	-2222.0	-175.4	-5635.5	258943.0	-17663390.0	-5745.0
254.52	-1668.8	-105.5	-3318.0	154684.0	-15323130.0	-1622.0
254.53	-1095.3	-118.0	-3971.8	171253.0	-7218714.0	-6279.0
254.54	-2024.8	-155.2	-4965.7	230633.0	-15893390.0	-4761.0
254.55	-1757.3	-156.8	-5137.9	229249.0	-13315560.0	-6504.0
254.56	-1560.0	-136.7	-4468.4	201010.0	-11555540.0	-5520.0
254.57	-991.7	-90.8	-3055.4	127286.0	-8928445.0	-4031.0
254.58	-1456.5	-109.3	-3550.4	156822.0	-13269300.0	-3272.0
254.59	-1347.7	-140.4	-4701.3	203015.0	-9501709.0	-7170.0
254.60	-1812.5	-159.1	-5197.7	232754.0	-13839560.0	-6412.0
254.61	-794.5	-70.7	-2385.3	98981.0	-7166446.0	-3047.0
254.62	-1259.2	-89.1	-2880.4	128492.0	-11509270.0	-2288.0
254.63	-1150.5	-120.3	-4031.4	174777.0	-7738710.0	-6186.0
254.64	-1615.2	-138.9	-4528.2	204507.0	-12079530.0	-5427.0
254.108	877.5	313.6	-6096.3	-100239.0	-6390510.0	-7342.0
254.109	543.4	238.5	-4417.9	-1400.0	-7542221.0	-9042.0
254.110	-86.6	-317.9	-16170.0	718089.0	-7980958.0	-11722.0
254.111	-420.8	-391.3	-18067.9	809536.0	-9131694.0	-13424.0
254.112	-1301.9	220.1	-12185.3	-533594.0	-3250097.0	3278.0
254.113	-1636.0	146.4	-9683.0	-436950.0	-4401808.0	1577.0
254.114	-2267.6	-242.5	-11644.9	100843.0	-4838950.0	-1107.0
254.115	-2602.0	-313.6	-13590.0	191172.0	-5989737.0	-2808.0
254.116	761.0	222.7	-2625.9	25628.0	-6522049.0	-7983.0
254.117	427.1	140.7	-992.7	134381.0	-7672709.0	-9683.0
254.118	30.4	-223.8	-10629.4	591011.0	-7850292.0	-11080.0
254.119	-304.0	-297.6	-12574.0	683919.0	-9001079.0	-12782.0
254.120	-1418.4	130.3	-8034.7	-408741.0	-3381635.0	2637.0
254.121	-1752.4	56.7	-5520.9	-311906.0	-4532321.0	936.0
254.122	-2150.5	-162.1	-6566.9	-10910.0	-4708260.0	-467.0
254.123	-2484.7	-233.7	-8510.3	79729.0	-5858996.0	-2168.0
254.124	860.2	808.8	-3817.9	-208577.0	-6352897.0	-7208.0
254.125	526.3	733.6	-2145.8	-109824.0	-7504556.0	-8909.0
254.126	-103.4	201.2	-17565.8	571774.0	-7944217.0	-11588.0
254.127	-437.6	130.5	-19327.3	660084.0	-9094953.0	-13289.0
254.128	-1286.1	-168.1	-15878.1	-504232.0	-3285091.0	3140.0
254.129	-1620.3	-241.5	-13380.8	-407618.0	-4436827.0	1439.0
254.130	-2251.9	-634.1	-9777.4	141832.0	-4872969.0	-1244.0
254.131	-2586.3	-704.9	-11724.2	232012.0	-6023756.0	-2945.0
254.132	744.3	709.1	-406.1	-69729.0	-6484283.0	-7847.0

254.133	410.2	629.9	-1266.1	33177.0	-7635994.0	-9548.0
254.134	13.0	290.9	-12305.4	452902.0	-7812704.0	-10947.0
254.135	-321.4	216.6	-14258.1	546574.0	-8963491.0	-12649.0
254.136	-1402.4	-246.8	-12163.0	-392236.0	-3416579.0	2502.0
254.137	-1736.4	-322.9	-9524.1	-292669.0	-4568264.0	801.0
254.138	-2134.6	-555.6	-4883.3	32823.0	-4743228.0	-603.0
254.139	-2469.0	-624.2	-6627.4	119412.0	-5894015.0	-2305.0
254.140	1236.3	967.7	-30631.3	-1161000.0	-3429536.0	1482.0
254.141	902.2	886.1	-28121.0	-1059000.0	-4580248.0	-218.0
254.142	-1980.0	-932.7	-41827.6	1348000.0	-8730029.0	-13116.0
254.143	-2314.3	-999.7	-43762.9	1435000.0	-9879791.0	-14818.0
254.144	582.4	914.9	-33105.0	-1270000.0	-2487333.0	4671.0
254.145	248.4	833.2	-30594.5	-1167000.0	-3639018.0	2970.0
254.146	-2634.1	-888.6	-40491.9	1147000.0	-7786876.0	-9933.0
254.147	-2968.3	-955.7	-42426.5	1234000.0	-8937612.0	-11635.0
254.148	1231.2	1119.8	-29564.2	-1197000.0	-3417829.0	1522.0
254.149	897.2	1045.1	-27054.7	-1100000.0	-4569515.0	-179.0
254.150	-1985.1	-816.3	-42350.0	1336000.0	-8719322.0	-13074.0
254.151	-2319.3	-883.1	-44288.1	1423000.0	-9870059.0	-14776.0
254.152	587.3	766.1	-34218.8	-1238000.0	-2499090.0	4631.0
254.153	253.2	684.2	-31712.2	-1135000.0	-3649801.0	2931.0
254.154	-2629.1	-1006.3	-39962.2	1160000.0	-7797609.0	-9974.0
254.155	-2963.4	-1074.7	-41896.9	1248000.0	-8948370.0	-11676.0
254.156	848.1	663.3	-16760.9	-742761.0	-3865964.0	-656.0
254.157	514.0	581.3	-14256.1	-639606.0	-5016676.0	-2356.0
254.158	-1590.7	-662.8	-24785.5	971505.9	-8292322.0	-10983.0
254.159	-1925.0	-729.4	-26719.4	1058000.0	-9443084.0	-12686.0
254.160	194.1	610.0	-19248.4	-850905.9	-2923786.0	2533.0
254.161	-140.0	528.0	-16743.7	-747749.0	-4075497.0	833.0
254.162	-2244.6	-619.6	-23451.2	770815.0	-7350118.0	-7800.0
254.163	-2578.9	-686.3	-25390.3	857624.0	-8499880.0	-9502.0
254.164	843.2	818.5	-15678.3	-781426.0	-3854207.0	-617.0
254.165	509.1	743.1	-13174.9	-683188.0	-5005918.0	-2317.0
254.166	-1595.9	-545.4	-25313.3	958899.0	-8281641.0	-10942.0
254.167	-1930.1	-611.4	-27219.7	1045000.0	-9432377.0	-12644.0
254.168	198.8	460.2	-20382.2	-817418.0	-2934594.0	2494.0
254.169	-135.3	378.3	-17877.5	-714261.0	-4086306.0	794.0
254.170	-2239.5	-736.0	-22933.5	782726.0	-7360825.0	-7842.0
254.171	-2573.7	-803.2	-24869.3	869897.0	-8510562.0	-9544.0
254.268	504.6	358.7	-9830.4	-367159.0	-3949059.0	-1641.0
254.269	-608.6	102.0	-2811.6	-30468.0	-7786310.0	-7310.0
254.270	-459.8	-251.6	-12365.6	431266.0	-5539583.0	-6019.0
254.271	-1574.0	-483.9	-18799.8	727752.0	-9375088.0	-11693.0
254.272	-149.0	312.5	-12255.1	-480108.0	-3006779.0	1546.0
254.273	-1262.7	52.4	-3935.9	-147043.0	-6845158.0	-4123.0
254.274	-1113.9	-214.6	-11028.4	235451.0	-4597430.0	-2835.0
254.275	-2228.3	-452.0	-17494.7	536192.0	-8431985.0	-8509.0
254.276	388.2	268.3	-5664.0	-242350.0	-4079572.0	-2283.0
254.277	-725.1	6.0	-471.4	101808.0	-7917849.0	-7951.0
254.278	-343.0	-166.8	-7248.0	315289.0	-5408968.0	-5379.0
254.279	-1457.3	-399.1	-13577.1	611590.0	-9243498.0	-11052.0
254.280	-265.5	220.7	-8103.9	-353947.0	-3138318.0	905.0
254.281	-1379.2	-34.2	-164.4	-26016.0	-6975696.0	-4764.0
254.282	-997.0	-134.3	-5923.0	122938.0	-4465790.0	-2196.0
254.283	-2111.3	-371.3	-12462.7	424775.0	-8301321.0	-7869.0
254.284	499.6	508.5	-8781.7	-401520.0	-3937327.0	-1601.0
254.285	-613.7	250.9	-2128.4	-63402.0	-7775604.0	-7270.0
254.286	-464.8	-100.4	-12874.4	391507.0	-5528850.0	-5979.0
254.287	-1579.0	-345.9	-19278.8	698480.0	-9364355.0	-11652.0
254.288	-144.2	182.1	-13368.2	-461042.0	-3017562.0	1505.0

254.289	-1258.0	-64.0	-5034.8	-137969.0	-6854966.0	-4164.0
254.290	-1109.1	-329.1	-10461.0	245217.0	-4607213.0	-2877.0
254.291	-2223.5	-569.7	-16933.5	548437.0	-8442769.0	-8550.0
254.292	383.1	417.4	-4633.6	-275957.0	-4068865.0	-2243.0
254.293	-730.3	157.4	-1038.9	64570.0	-7906167.0	-7911.0
254.294	-347.9	-14.2	-7675.7	273888.0	-5398210.0	-5339.0
254.295	-1462.4	-257.6	-14079.7	580526.0	-9232791.0	-11011.0
254.296	-260.8	92.5	-9215.9	-336484.0	-3149126.0	864.0
254.297	-1374.4	-152.0	-986.0	-15072.0	-6986479.0	-4805.0
254.298	-992.2	-248.0	-5360.3	132308.0	-4476573.0	-2237.0
254.299	-2106.3	-487.9	-11775.0	434403.0	-8312053.0	-7909.0
257.1	5226.4	134.3	35.1	211408.0	-10644850.0	-9679.0
257.2	7373.2	176.8	47.8	266184.0	-15620530.0	-20845.0
257.3	6147.1	274.6	73.2	418735.0	-12521400.0	-7336.0
257.4	8294.0	318.6	86.2	474982.0	-17507060.0	-18502.0
257.5	4018.9	102.9	26.9	162427.0	-8182008.0	-7442.0
257.6	6165.8	145.2	39.6	216953.0	-13166660.0	-18609.0
257.7	4939.7	243.4	65.0	369903.0	-10067540.0	-5100.0
257.8	7086.5	287.0	77.9	425741.0	-15043220.0	-16266.0
257.9	9520.1	217.9	60.2	319537.0	-20606180.0	-32011.0
257.10	5870.9	232.5	61.8	356554.0	-11961430.0	-8039.0
257.11	10164.6	317.1	87.0	465588.0	-21922770.0	-30371.0
257.12	8312.7	186.2	51.9	270201.0	-18152320.0	-29775.0
257.13	4663.5	201.3	53.6	307681.0	-9497570.0	-5803.0
257.14	8957.2	285.4	78.7	416225.0	-19468900.0	-28135.0
257.15	8017.8	275.8	74.6	412086.0	-16937090.0	-19205.0
257.16	6810.3	244.4	66.4	363033.0	-14483250.0	-16969.0
257.17	4257.9	114.9	29.4	186557.0	-8404409.0	-4634.0
257.18	6404.8	158.8	42.4	242684.0	-13386060.0	-15800.0
257.19	5178.7	255.5	67.6	394180.0	-10286940.0	-2292.0
257.20	7325.5	300.0	80.7	450975.0	-15272620.0	-13458.0
257.21	3050.5	83.6	21.3	137681.0	-5946546.0	-2398.0
257.22	5197.4	127.2	34.2	193475.0	-10932200.0	-13564.0
257.23	3971.2	223.9	59.4	344981.0	-7828103.0	-56.0
257.24	6118.1	268.8	72.5	402073.0	-12808760.0	-11222.0
257.25	8551.7	200.1	54.8	296202.0	-18371720.0	-26966.0
257.26	4902.5	213.0	56.1	331644.0	-9716971.0	-2994.0
257.27	9196.2	299.3	81.6	442308.0	-19688300.0	-25327.0
257.28	7344.2	168.5	46.6	246970.0	-15917880.0	-24730.0
257.29	3695.0	182.0	48.0	282989.0	-7263133.0	-758.0
257.30	7988.8	267.6	73.4	393040.0	-17234440.0	-23090.0
257.31	3612.3	102.2	25.7	170274.0	-6914102.0	-1271.0
257.32	5759.2	146.6	38.8	226900.0	-11899760.0	-12437.0
257.33	4256.8	200.4	52.4	315389.0	-8231689.0	369.0
257.34	6403.7	244.8	65.4	372021.0	-13216340.0	-10797.0
257.35	2404.9	70.6	17.5	120976.0	-4456238.0	965.0
257.36	4551.7	115.1	30.5	177785.0	-9435916.0	-10201.0
257.37	3049.4	169.5	44.3	266907.0	-5772825.0	2605.0
257.38	5196.3	213.7	57.3	323224.0	-10752480.0	-8561.0
257.39	7049.3	257.4	69.1	388244.0	-14702650.0	-14160.0
257.40	5841.9	226.3	61.0	339531.0	-12248790.0	-11924.0
257.41	5613.8	141.9	37.4	221234.0	-11536620.0	-11697.0
257.42	7760.6	184.0	50.0	275563.0	-16522300.0	-22863.0
257.43	6534.5	282.6	75.5	428924.0	-13413180.0	-9354.0
257.44	8681.4	325.8	88.3	484332.0	-18398830.0	-20520.0
257.45	4406.3	110.5	29.2	172208.0	-9072783.0	-9460.0
257.46	6553.2	152.4	41.7	226280.0	-14058440.0	-20626.0
257.47	5327.1	251.1	67.3	379776.0	-10959310.0	-7118.0
257.48	7473.9	294.1	80.1	435074.0	-15944990.0	-18284.0
257.49	9907.5	225.0	62.3	328785.0	-21497950.0	-34029.0

257.50	6258.3	240.2	64.0	366429.0	-12853210.0	-10057.0
257.51	10552.0	324.2	89.1	474889.0	-22814540.0	-32389.0
257.52	8700.0	193.4	54.1	279567.0	-19044120.0	-31793.0
257.53	5050.8	209.0	55.9	317585.0	-10389370.0	-7821.0
257.54	9344.6	292.5	80.9	425524.0	-20360680.0	-30153.0
257.55	8405.1	283.0	76.8	421450.0	-17838890.0	-21223.0
257.56	7197.7	251.6	68.5	372380.0	-15375020.0	-18987.0
257.57	5872.0	147.0	38.9	227760.0	-12131160.0	-13042.0
257.58	8018.9	188.8	51.4	281761.0	-17116810.0	-24208.0
257.59	6516.5	245.2	65.5	372920.0	-13447740.0	-11402.0
257.60	8663.4	287.8	78.2	427690.0	-18433400.0	-22568.0
257.61	4664.6	115.6	30.7	178710.0	-9677291.0	-10806.0
257.62	6811.4	157.0	43.1	232372.0	-14652970.0	-21972.0
257.63	5309.1	214.1	57.4	324177.0	-10993880.0	-9166.0
257.64	7455.9	256.3	70.0	378609.0	-15969560.0	-20332.0
257.108	2004.0	-2643.5	-274.1	-2704000.0	-2790886.0	-3996.0
257.109	2652.4	-2427.6	720.7	-2470000.0	-4314484.0	-6216.0
257.110	2846.1	-1360.2	-2743.3	-1284000.0	-5167372.0	-1945.0
257.111	3494.5	-1150.2	-1741.4	-1060000.0	-6689970.0	-4165.0
257.112	5283.6	861.2	1542.3	980892.0	-11190340.0	-8859.0
257.113	5931.8	1059.3	2588.1	1199000.0	-12705990.0	-11079.0
257.114	6124.7	1711.9	-828.8	1959000.0	-13557080.0	-6812.0
257.115	6773.1	1871.4	156.4	2148000.0	-15082680.0	-9032.0
257.116	1941.0	-3036.1	1795.3	-3156000.0	-2575860.0	-4158.0
257.117	2589.5	-2821.3	2789.2	-2923000.0	-4099433.0	-6378.0
257.118	2909.8	-953.5	-4799.2	-815428.0	-5384221.0	-1786.0
257.119	3558.2	-743.2	-3797.3	-590932.0	-6906819.0	-4006.0
257.120	5220.6	459.8	3611.7	520872.0	-10976320.0	-9021.0
257.121	5869.0	641.0	4595.4	727806.0	-12491920.0	-11241.0
257.122	6188.2	2180.3	-2872.3	2488000.0	-13780980.0	-6650.0
257.123	6836.5	2331.2	-1886.5	2667000.0	-15296610.0	-8870.0
257.124	2043.0	-4900.0	-2564.7	-5118000.0	-2865997.0	-4364.0
257.125	2691.3	-4689.1	-1570.8	-4889000.0	-4389621.0	-6584.0
257.126	2884.7	-3583.0	-4953.4	-3677000.0	-5241585.0	-2311.0
257.127	3533.2	-3372.7	-3952.0	-3452000.0	-6765157.0	-4532.0
257.128	5245.5	2236.4	3690.6	2548000.0	-11110000.0	-8503.0
257.129	5894.0	2400.1	4678.4	2742000.0	-12635580.0	-10723.0
257.130	6087.5	3043.0	1169.9	3500000.0	-13486510.0	-6457.0
257.131	6736.0	3200.6	2154.5	3688000.0	-15012090.0	-8676.0
257.132	1980.1	-5282.7	-498.0	-5560000.0	-2650946.0	-4525.0
257.133	2628.5	-5069.0	495.8	-5327000.0	-4174544.0	-6745.0
257.134	2948.4	-3174.5	-7008.6	-3206000.0	-5458433.0	-2152.0
257.135	3596.9	-2962.4	-6006.4	-2980000.0	-6982006.0	-4373.0
257.136	5183.0	1802.6	5662.6	2061000.0	-10895850.0	-8664.0
257.137	5831.3	1975.5	6650.8	2264000.0	-12421470.0	-10884.0
257.138	6150.6	3449.3	-876.9	3965000.0	-13710520.0	-6295.0
257.139	6799.0	3610.2	109.1	4155000.0	-15226110.0	-8515.0
257.140	2171.0	-2732.5	3317.9	-2899000.0	-2960543.0	-8092.0
257.141	2819.3	-2486.9	4318.9	-2633000.0	-4483167.0	-10312.0
257.142	4977.0	1018.5	-4952.1	1317000.0	-10878080.0	-1262.0
257.143	5625.4	1159.1	-3967.8	1483000.0	-12403680.0	-3482.0
257.144	3154.9	-1549.8	3927.7	-1665000.0	-5479075.0	-9549.0
257.145	3803.3	-1303.4	4928.9	-1399000.0	-7001674.0	-11769.0
257.146	5960.7	1792.4	-4410.9	2146000.0	-13398660.0	-2723.0
257.147	6609.1	1932.2	-3426.6	2311000.0	-14924260.0	-4943.0
257.148	2182.7	-3412.5	2629.3	-3627000.0	-2982576.0	-8203.0
257.149	2831.0	-3197.5	3623.8	-3393000.0	-4506200.0	-10423.0
257.150	4988.2	620.5	-5554.3	860705.0	-10905240.0	-1368.0
257.151	5636.7	759.7	-4570.5	1024000.0	-12420820.0	-3588.0
257.152	3143.4	-893.9	4608.6	-958758.0	-5456991.0	-9439.0



257.153	3791.7	-647.0	5610.2	-691048.0	-6979614.0	-11659.0
257.154	5949.5	2196.7	-3806.8	2610000.0	-13381510.0	-2616.0
257.155	6597.8	2338.6	-2821.7	2777000.0	-14897130.0	-4836.0
257.156	1961.3	-4024.0	10218.6	-4390000.0	-2243712.0	-8633.0
257.157	2609.6	-3776.6	11220.3	-4122000.0	-3766336.0	-10853.0
257.158	5188.2	2486.8	-11773.0	2991000.0	-11604530.0	-728.0
257.159	5836.7	2625.4	-10789.4	3153000.0	-13120110.0	-2949.0
257.160	2945.2	-2832.6	10830.4	-3147000.0	-4762245.0	-10090.0
257.161	3593.5	-2585.2	11832.1	-2878000.0	-6284868.0	-12309.0
257.162	6171.9	3258.8	-11231.8	3817000.0	-14115110.0	-2189.0
257.163	6820.3	3397.5	-10248.1	3980000.0	-15640710.0	-4410.0
257.164	1973.0	-4721.8	9526.3	-5137000.0	-2265746.0	-8744.0
257.165	2621.3	-4503.9	10521.7	-4899000.0	-3789370.0	-10964.0
257.166	5199.5	2086.8	-12376.2	2531000.0	-11621670.0	-835.0
257.167	5848.0	2225.0	-11392.8	2694000.0	-13147240.0	-3056.0
257.168	2933.6	-2168.1	11513.7	-2430000.0	-4740186.0	-9979.0
257.169	3581.9	-1920.8	12515.4	-2162000.0	-6262810.0	-12198.0
257.170	6160.7	3653.9	-10630.3	4271000.0	-14097960.0	-2083.0
257.171	6809.1	3795.1	-9645.9	4437000.0	-15623550.0	-4303.0
257.268	2395.1	-1465.5	-705.3	-1499000.0	-3951722.0	-3105.0
257.269	4556.5	-752.6	2614.3	-723147.0	-9024699.0	-10506.0
257.270	3236.8	-148.4	-3154.7	-50839.0	-6327310.0	-1054.0
257.271	5398.3	404.8	143.4	579479.0	-11401260.0	-8455.0
257.272	3379.1	-303.4	-99.0	-291288.0	-6470230.0	-4563.0
257.273	5540.1	435.2	3223.7	519667.0	-11545310.0	-11963.0
257.274	4220.6	689.6	-2599.2	838176.0	-8845867.0	-2515.0
257.275	6381.9	1209.3	691.7	1444000.0	-13921870.0	-9916.0
257.276	2332.2	-1859.5	1363.3	-1954000.0	-3736671.0	-3268.0
257.277	4493.5	-1144.7	4675.5	-1174000.0	-8814673.0	-10668.0
257.278	3300.2	266.0	-5207.0	425783.0	-6543235.0	-895.0
257.279	5461.8	835.1	-1904.2	1069000.0	-11625160.0	-8295.0
257.280	3316.1	-685.6	1972.9	-732811.0	-6255203.0	-4725.0
257.281	5477.1	26.8	5244.5	55705.0	-11331280.0	-12125.0
257.282	4283.9	1130.7	-4645.5	1340000.0	-9063817.0	-2355.0
257.283	6445.2	1642.0	-1354.8	1936000.0	-14135820.0	-9755.0
257.284	2406.7	-2138.0	-1392.8	-2219000.0	-3973781.0	-3215.0
257.285	4568.1	-1423.2	1934.0	-1441000.0	-9051759.0	-10616.0
257.286	3248.3	-804.3	-3815.7	-755027.0	-6349394.0	-1164.0
257.287	5409.7	-152.0	-491.5	-35603.0	-11428370.0	-8564.0
257.288	3367.6	211.1	549.5	279400.0	-6448145.0	-4454.0
257.289	5528.8	833.1	3825.1	979475.0	-11528170.0	-11856.0
257.290	4209.3	1067.8	-2001.2	1277000.0	-8824732.0	-2409.0
257.291	6370.7	1610.3	1291.7	1908000.0	-13904710.0	-9809.0
257.292	2343.8	-2530.9	676.6	-2671000.0	-3758730.0	-3377.0
257.293	4505.2	-1819.5	3989.5	-1896000.0	-8836706.0	-10778.0
257.294	3311.7	-395.5	-5870.6	-281357.0	-6565319.0	-1004.0
257.295	5473.3	267.2	-2543.7	442691.0	-11642250.0	-8404.0
257.296	3304.7	-186.5	2618.6	-177083.0	-6233094.0	-4617.0
257.297	5465.8	428.9	5860.1	518978.0	-11314150.0	-12017.0
257.298	4272.7	1513.8	-4047.6	1784000.0	-9036657.0	-2249.0
257.299	6434.0	2038.7	-754.1	2396000.0	-14118660.0	-9648.0
266.1	-30049.5	-938.7	-15070.6	390691.0	3610949.0	-3308.0
266.2	-63127.5	-977.2	-19945.9	391936.0	3574022.0	7396.0
266.3	-26460.1	-1939.4	-26118.3	819576.0	9741041.0	-20330.0
266.4	-59538.0	-1974.9	-30986.1	818321.0	9714141.0	-9629.0
266.5	-23122.1	-720.8	-11609.0	299966.0	2765392.0	-2517.0
266.6	-56200.0	-759.8	-16487.0	301573.0	2730490.0	8189.0
266.7	-19532.6	-1721.2	-22656.9	728576.0	8897509.0	-19538.0
266.8	-52610.5	-1757.3	-27529.6	727854.0	8870609.0	-8836.0
266.9	-96205.3	-1017.8	-24837.6	394811.0	3547145.0	18106.0

266.10	-27537.0	-1639.3	-22804.2	690989.0	7907994.0	-15223.0
266.11	-93692.5	-1716.2	-32568.0	693294.0	7844267.0	6189.0
266.12	-89277.8	-800.4	-21383.7	304465.0	2703613.0	18899.0
266.13	-20609.5	-1421.2	-19342.8	600064.0	7064462.0	-14432.0
266.14	-86765.1	-1498.9	-29113.8	603029.0	7000710.0	6982.0
266.15	-60614.9	-1676.0	-27671.6	690780.0	7871092.0	-4521.0
266.16	-53687.4	-1458.2	-24215.7	600100.0	7027560.0	-3729.0
266.17	-15161.6	-923.5	-12867.2	391490.0	3627776.0	-8146.0
266.18	-48239.7	-959.7	-17730.3	390919.0	3598824.0	2554.0
266.19	-11572.3	-1923.8	-23913.5	820096.0	9765844.0	-25169.0
266.20	-44650.3	-1958.5	-28774.1	818212.0	9728917.0	-14470.0
266.21	-8234.2	-705.4	-9406.3	300600.0	2785219.0	-7355.0
266.22	-41312.3	-742.2	-14270.9	300540.0	2755267.0	3346.0
266.23	-4644.8	-1706.2	-20453.2	729500.0	8922311.0	-24376.0
266.24	-37722.8	-1740.3	-25313.4	727284.0	8885384.0	-13679.0
266.25	-81317.6	-1000.2	-22617.0	393764.0	3561923.0	13263.0
266.26	-12649.2	-1624.4	-20598.9	692037.0	7922796.0	-20061.0
266.27	-78804.9	-1698.5	-30347.1	692202.0	7859017.0	1345.0
266.28	-74390.1	-782.7	-19160.2	303328.0	2718391.0	14056.0
266.29	-5721.7	-1405.8	-17137.2	600788.0	7080264.0	-19271.0
266.30	-71877.4	-1481.0	-26891.3	601785.0	7015485.0	2138.0
266.31	-5236.4	-912.9	-11399.3	391610.0	3640311.0	-11372.0
266.32	-38314.5	-948.2	-16254.7	390382.0	3605359.0	-674.0
266.33	-2724.0	-1613.8	-19128.4	692240.0	7936330.0	-23288.0
266.34	-35801.9	-1648.7	-23988.9	690622.0	7902428.0	-12589.0
266.35	1691.1	-695.5	-7938.7	301297.0	2797778.0	-10579.0
266.36	-31387.1	-730.6	-12794.2	299862.0	2761801.0	118.0
266.37	4203.5	-1395.0	-15666.6	600748.0	7093798.0	-22498.0
266.38	-28874.5	-1430.5	-20526.9	599594.0	7058871.0	-11798.0
266.39	-45727.1	-1659.3	-25459.4	690385.0	7895894.0	-9362.0
266.40	-38799.7	-1440.9	-21997.9	599246.0	7052336.0	-8571.0
266.41	-36004.6	-945.0	-15952.3	390492.0	3601034.0	-1373.0
266.42	-69082.6	-984.2	-20832.6	392357.0	3564108.0	9333.0
266.43	-32415.2	-1945.0	-27000.4	818833.0	9741126.0	-18395.0
266.44	-65493.1	-1981.8	-31874.0	818713.0	9704224.0	-7692.0
266.45	-29077.2	-727.2	-12490.7	299835.0	2757476.0	-581.0
266.46	-62155.1	-766.8	-17373.8	302051.0	2720575.0	10126.0
266.47	-25487.8	-1727.3	-23539.4	728260.0	8897568.0	-17603.0
266.48	-58565.6	-1764.4	-28417.6	728287.0	8860692.0	-6899.0
266.49	-102200.0	-1024.9	-25726.4	395350.0	3527190.0	20044.0
266.50	-33492.1	-1645.4	-23686.3	690684.0	7898078.0	-13288.0
266.51	-99647.6	-1723.3	-33457.2	693762.0	7834352.0	8126.0
266.52	-95232.9	-807.4	-22273.0	304844.0	2693698.0	20836.0
266.53	-26564.6	-1427.2	-20224.3	599727.0	7054546.0	-12497.0
266.54	-92720.2	-1506.0	-30003.5	603484.0	6990795.0	8920.0
266.55	-66569.9	-1683.0	-28559.4	691167.0	7861202.0	-2584.0
266.56	-59642.4	-1465.2	-25103.9	600504.0	7017669.0	-1791.0
266.57	-39974.7	-949.2	-16540.2	390385.0	3594415.0	-82.0
266.58	-73052.6	-989.0	-21423.7	392700.0	3557514.0	10625.0
266.59	-37462.2	-1649.6	-24274.4	690598.0	7891460.0	-11997.0
266.60	-70540.0	-1687.6	-29151.3	691418.0	7854583.0	-1292.0
266.61	-33047.3	-731.4	-13078.9	299765.0	2750857.0	710.0
266.62	-66125.2	-771.7	-17964.7	302504.0	2723956.0	11418.0
266.63	-30534.7	-1431.3	-20812.4	599501.0	7047927.0	-11206.0
266.64	-63612.5	-1469.9	-25696.0	600779.0	7021051.0	-500.0
266.108	-25760.2	-1327.6	-8523.6	969323.1	1361501.0	41147.0
266.109	-29799.0	-2120.5	-11452.9	1356000.0	3104464.0	34011.0
266.110	-21813.3	-115.8	-12247.4	-523.0	9509238.0	30590.0
266.111	-25853.7	-915.5	-15107.7	392484.0	11254790.0	23439.0
266.112	-17472.1	-2196.6	-22408.2	1253000.0	-722050.9	-40042.0

266.113	-21507.0	-3067.3	-25885.1	1706000.0	1034900.0	-47122.0
266.114	-13495.2	-2077.2	-31234.8	1192000.0	7488292.0	-49129.0
266.115	-17537.7	-2957.9	-34396.5	1649000.0	9233316.0	-56190.0
266.116	-25829.2	-1249.4	-15639.0	846944.1	530006.6	41257.0
266.117	-29867.9	-2040.5	-18585.6	1232000.0	2278994.0	34129.0
266.118	-21729.4	-262.7	-4971.0	172359.0	10370510.0	30242.0
266.119	-25769.5	-1058.8	-7836.4	562648.0	12126140.0	23100.0
266.120	-17540.8	-2123.9	-29690.3	1136000.0	-1551470.0	-39899.0
266.121	-21579.8	-2986.8	-33133.7	1581000.0	195441.8	-46964.0
266.122	-13427.8	-2198.6	-23830.3	1350000.0	8315381.0	-49565.0
266.123	-17471.1	-3072.1	-27010.1	1801000.0	10060200.0	-56616.0
266.124	-25743.5	-8309.6	-6789.4	6354000.0	1407735.0	49529.0
266.125	-29784.7	-9097.9	-9728.2	6738000.0	3148090.0	42408.0
266.126	-21808.3	-7173.8	-10458.2	5451000.0	9530505.0	39071.0
266.127	-25847.7	-7966.7	-13341.0	5838000.0	11276320.0	31933.0
266.128	-17420.2	3197.1	-33306.0	-2836000.0	-622891.8	-45560.0
266.129	-21461.3	2319.5	-36507.5	-2382000.0	1121488.0	-52651.0
266.130	-13446.1	3364.7	-41922.7	-2943000.0	7580742.0	-54650.0
266.131	-17488.8	2482.9	-45099.3	-2485000.0	9325715.0	-61709.0
266.132	-25824.1	-8232.0	-14017.1	6237000.0	551299.7	49713.0
266.133	-29862.8	-9024.1	-16945.8	6624000.0	2300287.0	42610.0
266.134	-21724.7	-7312.9	-3197.3	5618000.0	10391700.0	38736.0
266.135	-25764.6	-8103.9	-6080.7	6004000.0	12147390.0	31593.0
266.136	-17494.3	3279.1	-40618.2	-2964000.0	-1464680.0	-45318.0
266.137	-21535.7	2411.3	-43843.1	-2517000.0	277623.1	-52396.0
266.138	-13376.5	3272.8	-34517.8	-2813000.0	8418388.0	-55063.0
266.139	-17418.9	2393.0	-37677.0	-2357000.0	10153440.0	-62132.0
266.140	-27473.0	-2561.3	-7089.2	1794000.0	-8889779.0	24583.0
266.141	-31513.3	-3303.1	-10008.7	2140000.0	-7144903.0	17332.0
266.142	-14263.9	43.9	-24950.4	-232823.0	18393390.0	-8628.0
266.143	-18306.1	-859.8	-28018.7	243230.0	20128490.0	-15605.0
266.144	-24999.0	-2547.9	-9710.0	1653000.0	-9541496.0	-176.0
266.145	-29039.4	-3288.5	-12629.3	1998000.0	-7796537.0	-7430.0
266.146	-11765.3	-848.0	-32444.0	374950.0	17786910.0	-32020.0
266.147	-15807.3	-1751.2	-35509.6	850484.0	19532060.0	-38997.0
266.148	-27471.0	-4671.3	-6596.5	3423000.0	-8883273.0	27136.0
266.149	-31509.6	-5467.0	-9515.1	3812000.0	-7134109.0	19996.0
266.150	-14278.9	-1587.2	-21738.9	1006000.0	18359580.0	-6990.0
266.151	-18320.0	-2492.0	-24820.4	1482000.0	20104960.0	-13957.0
266.152	-24998.0	-458.7	-10272.5	38597.0	-9542243.0	-2627.0
266.153	-29039.8	-1200.5	-13180.0	385195.0	-7800427.0	-9890.0
266.154	-11753.6	791.5	-35638.6	-869443.0	17809880.0	-33694.0
266.155	-15795.0	-101.7	-38723.9	-402306.0	19555180.0	-40695.0
266.156	-27697.3	-2260.4	-30855.3	1353000.0	-11646650.0	24924.0
266.157	-31739.7	-3002.4	-33758.1	1699000.0	-9905601.0	17657.0
266.158	-13999.8	-290.5	152.9	218497.0	21240350.0	-10295.0
266.159	-18040.4	-1195.6	-2934.8	695270.0	22985860.0	-17258.0
266.160	-25225.0	-2230.1	-33484.7	1198000.0	-12301800.0	146.0
266.161	-29267.4	-2972.1	-36387.5	1545000.0	-10560750.0	-7121.0
266.162	-11501.9	-1193.9	-7227.5	835701.0	20633690.0	-33701.0
266.163	-15542.5	-2099.0	-10315.1	1312000.0	22379200.0	-40664.0
266.164	-27693.2	-4404.5	-30351.2	3009000.0	-11634610.0	27532.0
266.165	-31734.0	-5198.2	-33253.5	3397000.0	-9891155.0	20372.0
266.166	-14011.6	-1915.6	3248.6	1451000.0	21217360.0	-8624.0
266.167	-18052.1	-2820.8	161.1	1928000.0	22962890.0	-15585.0
266.168	-25228.6	-129.6	-34027.7	-423565.0	-12311710.0	-2343.0
266.169	-29271.0	-871.6	-36930.5	-76681.0	-10571660.0	-9610.0
266.170	-11485.4	430.7	-10409.4	-397813.0	20667880.0	-35331.0
266.171	-15527.6	-471.9	-13482.8	77347.0	22402980.0	-42310.0
266.268	-18161.1	-352.2	-8053.1	326872.0	-1435747.0	20393.0

266.269	-31625.2	-3000.4	-17792.5	1620000.0	4391431.0	-3379.0
266.270	-14206.2	763.9	-12323.7	-553387.0	6728018.0	9885.0
266.271	-27678.1	-2106.6	-21803.5	917112.0	12542220.0	-13589.0
266.272	-15682.0	-383.4	-10664.5	221022.0	-2076171.0	-4272.0
266.273	-29142.1	-3063.3	-21382.7	1548000.0	3761021.0	-28227.0
266.274	-11707.6	-0.5	-18941.4	-50932.0	6131538.0	-13694.0
266.275	-25176.7	-2927.8	-29360.7	1466000.0	11946450.0	-37201.0
266.276	-18226.3	-272.4	-15189.5	202382.0	-2258278.0	20522.0
266.277	-31692.6	-2924.4	-24912.0	1501000.0	3564342.0	-3261.0
266.278	-14124.6	619.3	-5091.6	-382163.0	7588708.0	9478.0
266.279	-27597.0	-2199.6	-14376.7	1046000.0	13402780.0	-14034.0
266.280	-15751.1	-284.5	-17791.8	82197.0	-2907692.0	-4187.0
266.281	-29214.9	-2981.2	-28659.7	1423000.0	2922562.0	-28064.0
266.282	-11627.6	-104.8	-11389.0	87583.0	6986822.0	-14197.0
266.283	-25103.3	-3038.9	-21872.1	1612000.0	12785060.0	-37633.0
266.284	-18159.9	-2447.0	-7568.2	1944000.0	-1430443.0	22920.0
266.285	-31622.7	-5097.2	-17304.5	3239000.0	4392065.0	-847.0
266.286	-14207.3	-1324.8	-11755.0	1057000.0	6727739.0	12361.0
266.287	-27681.5	-3999.2	-20318.9	2368000.0	12541360.0	-11448.0
266.288	-15675.9	1442.3	-12793.1	-1176000.0	-2066624.0	-6273.0
266.289	-29131.1	-1442.1	-24583.4	317037.0	3773810.0	-29892.0
266.290	-11692.9	1621.7	-22073.8	-1283000.0	6159265.0	-15299.0
266.291	-25161.9	-1292.5	-32550.6	223741.0	11980200.0	-38863.0
266.292	-18228.6	-2370.0	-14674.2	1823000.0	-2260862.0	23025.0
266.293	-31690.8	-5019.4	-24428.3	3118000.0	3564798.0	-712.0
266.294	-14126.8	-1468.5	-4360.1	1226000.0	7588150.0	11960.0
266.295	-27600.1	-4149.1	-13270.4	2545000.0	13392000.0	-11795.0
266.296	-15744.2	1513.0	-20079.9	-1292000.0	-2895942.0	-6137.0
266.297	-29202.0	-1360.2	-31862.7	192077.0	2945833.0	-29711.0
266.298	-11615.1	1508.9	-14529.6	-1137000.0	7009992.0	-15782.0
266.299	-25090.8	-1392.6	-25111.9	361065.0	12808230.0	-39297.0
267.1	-116.4	24.8	-76.5	-3356.0	1199487.0	1037.0
267.2	-790.4	34.3	-122.0	3991.0	2730594.0	472.0
267.3	-731.8	44.3	-65.9	-12640.0	3287452.0	2813.0
267.4	-1405.8	55.8	-105.2	-3239.0	4818560.0	2248.0
267.5	-88.2	19.0	-58.7	-2608.0	918953.9	796.0
267.6	-762.3	28.3	-104.3	4443.0	2449719.0	231.0
267.7	-703.6	38.8	-47.6	-11709.0	3006602.0	2572.0
267.8	-1377.7	49.9	-86.7	-2667.0	4537684.0	2007.0
267.9	-1464.4	42.6	-164.0	10087.0	4261702.0	-93.0
267.10	-547.1	38.5	-69.3	-9851.0	2661283.0	2280.0
267.11	-1895.2	57.7	-150.7	5091.0	5723472.0	1150.0
267.12	-1436.3	36.6	-144.1	10557.0	3980826.0	-333.0
267.13	-519.0	32.8	-51.0	-8989.0	2380408.0	2039.0
267.14	-1867.1	51.5	-130.6	5419.0	5442597.0	910.0
267.15	-1221.2	49.1	-110.0	-1376.0	4192365.0	1715.0
267.16	-1193.0	43.3	-91.9	-633.0	3911515.0	1474.0
267.17	186.4	19.6	-55.2	-7578.0	511880.7	1293.0
267.18	-487.5	30.5	-100.6	1216.0	2042394.0	728.0
267.19	-428.9	39.4	-46.2	-16645.0	2600252.0	3068.0
267.20	-1102.9	51.3	-86.6	-6799.0	4130360.0	2504.0
267.21	214.6	13.9	-36.7	-6697.0	230963.8	1052.0
267.22	-459.4	24.5	-83.1	1682.0	1761519.0	487.0
267.23	-400.8	33.5	-26.9	-16042.0	2318377.0	2828.0
267.24	-1074.8	45.7	-67.7	-5912.0	3849485.0	2263.0
267.25	-1161.6	38.8	-145.0	7271.0	3573476.0	163.0
267.26	-244.3	33.1	-50.2	-14234.0	1973058.0	2536.0
267.27	-1592.4	54.0	-132.0	2319.0	5035247.0	1406.0
267.28	-1133.5	32.9	-126.6	7832.0	3292601.0	-78.0
267.29	-216.2	27.8	-32.2	-13102.0	1692182.0	2295.0

267.30	-1564.3	48.0	-113.0	2828.0	4754372.0	1165.0
267.31	388.3	16.5	-40.0	-10064.0	53215.5	1464.0
267.32	-285.7	27.9	-86.3	-734.0	1583561.0	899.0
267.33	-42.4	30.0	-37.7	-16727.0	1514250.0	2706.0
267.34	-716.4	41.6	-78.1	-7251.0	3045357.0	2142.0
267.35	416.4	10.3	-21.2	-9689.0	-227716.8	1223.0
267.36	-257.5	22.0	-68.7	-157.0	1302711.0	658.0
267.37	-14.3	24.8	-19.8	-15382.0	1233374.0	2466.0
267.38	-688.3	36.1	-60.4	-6254.0	2764482.0	1901.0
267.39	-918.3	44.8	-90.5	-4681.0	3504165.0	1971.0
267.40	-890.2	39.4	-72.5	-3597.0	3223290.0	1730.0
267.41	-237.5	26.7	-84.7	-1754.0	1474782.0	935.0
267.42	-911.5	35.8	-130.3	5088.0	3005889.0	370.0
267.43	-852.9	46.8	-73.5	-10585.0	3562747.0	2710.0
267.44	-1526.9	57.4	-112.9	-2082.0	5093855.0	2145.0
267.45	-209.4	20.9	-66.9	-1067.0	1193907.0	694.0
267.46	-883.4	29.7	-112.4	5492.0	2725014.0	129.0
267.47	-824.8	40.8	-55.0	-10017.0	3281872.0	2469.0
267.48	-1498.8	51.4	-94.2	-1570.0	4812980.0	1905.0
267.49	-1585.6	44.0	-171.0	11072.0	4536971.0	-195.0
267.50	-668.3	40.5	-76.9	-8190.0	2936553.0	2177.0
267.51	-2016.4	59.2	-157.8	6150.0	5998742.0	1048.0
267.52	-1557.4	38.1	-151.3	11693.0	4256121.0	-436.0
267.53	-640.1	34.9	-59.3	-7261.0	2655703.0	1937.0
267.54	-1988.2	53.0	-137.5	6490.0	5716892.0	807.0
267.55	-1342.3	50.6	-117.8	-224.0	4467660.0	1613.0
267.56	-1314.2	44.8	-99.5	508.0	4186785.0	1372.0
267.57	-318.2	28.0	-90.1	-702.0	1658320.0	866.0
267.58	-992.3	36.7	-135.7	5765.0	3189402.0	302.0
267.59	-749.0	41.8	-81.9	-7178.0	3120091.0	2109.0
267.60	-1423.1	51.7	-123.0	558.0	4651173.0	1545.0
267.61	-290.1	22.2	-72.3	-45.0	1377445.0	626.0
267.62	-964.1	30.5	-117.5	6085.0	2908552.0	61.0
267.63	-720.9	36.3	-64.4	-6121.0	2839216.0	1868.0
267.64	-1394.9	45.8	-104.5	1258.0	4370323.0	1304.0
267.108	-71.7	-2587.0	-965.8	-2775000.0	610026.4	-2839.0
267.109	-468.9	-2489.8	-1515.2	-2667000.0	1899110.0	-1210.0
267.110	-844.4	-1648.1	-3515.3	-1746000.0	3246902.0	-740.0
267.111	-1241.3	-1545.8	-4153.0	-1634000.0	4534269.0	890.0
267.112	563.2	1058.6	3048.2	1070000.0	-994200.7	2149.0
267.113	165.2	1115.2	2243.0	1136000.0	297443.5	3780.0
267.114	-215.7	1304.0	-589.4	1356000.0	1663309.0	4267.0
267.115	-612.2	1352.7	-1717.0	1417000.0	2949777.0	5895.0
267.116	18.0	-2535.8	-556.8	-2717000.0	327483.9	-3013.0
267.117	-379.1	-2436.9	-1089.2	-2606000.0	1615879.0	-1385.0
267.118	-937.2	-1726.4	-4042.0	-1831000.0	3539373.0	-559.0
267.119	-1334.2	-1622.9	-4673.7	-1718000.0	4827714.0	1071.0
267.120	652.8	1106.0	3424.1	1124000.0	-1276483.0	1976.0
267.121	255.7	1162.8	2567.8	1191000.0	12390.7	3604.0
267.122	-305.3	1257.3	-1049.8	1304000.0	1945591.0	4442.0
267.123	-701.7	1309.3	-2188.3	1367000.0	3231084.0	6070.0
267.124	-62.7	-5054.5	-3341.4	-5408000.0	357624.4	-2722.0
267.125	-459.4	-4954.7	-3891.3	-5298000.0	1644519.0	-1095.0
267.126	-832.9	-4176.1	-5993.6	-4451000.0	2986818.0	-630.0
267.127	-1230.0	-4068.6	-6609.2	-4333000.0	4275134.0	999.0
267.128	539.8	2521.8	3688.2	2660000.0	-693468.6	2075.0
267.129	143.1	2568.8	2589.4	2719000.0	593815.0	3702.0
267.130	-238.3	2806.0	-216.6	2994000.0	1961579.0	4190.0
267.131	-634.7	2853.0	-1327.2	3053000.0	3248072.0	5818.0
267.132	29.6	-4993.9	-2901.5	-5339000.0	67124.1	-2904.0



267.133	-367.6	-4894.9	-3454.4	-5229000.0	1355795.0	-1276.0
267.134	-925.7	-4251.6	-6504.1	-4533000.0	3279289.0	-448.0
267.135	-1322.7	-4143.9	-7118.8	-4416000.0	4567630.0	1181.0
267.136	630.9	2571.5	4089.9	2718000.0	-980035.4	1895.0
267.137	234.2	2621.0	2990.8	2779000.0	307514.4	3523.0
267.138	-328.3	2756.7	-649.3	2938000.0	2244760.0	4365.0
267.139	-724.9	2806.0	-1782.6	2999000.0	3531202.0	5994.0
267.140	1053.5	-2084.4	3771.0	-2287000.0	-3032885.0	-3542.0
267.141	656.7	-1953.8	3215.0	-2144000.0	-1744494.0	-1915.0
267.142	-1532.0	125.9	-6246.7	162412.0	5791562.0	3475.0
267.143	-1928.6	162.5	-7388.8	209148.0	7078003.0	5104.0
267.144	1246.9	-823.3	5384.8	-955232.0	-3522849.0	-2056.0
267.145	850.0	-691.8	4828.7	-811529.0	-2234483.0	-428.0
267.146	-1344.1	827.6	-5777.1	899201.0	5319204.0	4981.0
267.147	-1740.8	864.0	-6919.4	945784.9	6606621.0	6610.0
267.148	1056.9	-2832.2	3061.0	-3085000.0	-3110023.0	-3508.0
267.149	659.6	-2737.4	2502.9	-2980000.0	-1821758.0	-1879.0
267.150	-1525.0	-319.0	-6357.9	-320411.0	5701337.0	3497.0
267.151	-1921.8	-284.9	-7485.1	-276437.0	6989728.0	5127.0
267.152	1243.0	-97.1	6192.2	-177768.0	-3442838.0	-2088.0
267.153	846.4	35.8	5614.0	-32364.0	-2156395.0	-461.0
267.154	-1350.3	1282.8	-5711.6	1393000.0	5406631.0	4957.0
267.155	-1747.1	1324.7	-6863.4	1445000.0	6694023.0	6586.0
267.156	1351.3	-1896.8	5227.2	-2077000.0	-3970378.0	-4116.0
267.157	954.9	-1763.0	4639.8	-1931000.0	-2683885.0	-2490.0
267.158	-1839.0	-41.3	-7806.6	-26467.0	6756722.0	4081.0
267.159	-2236.0	-7.9	-8928.3	16672.0	8045063.0	5711.0
267.160	1545.0	-622.0	6837.6	-730920.0	-4461265.0	-2631.0
267.161	1148.6	-488.2	6250.2	-584527.0	-3175773.0	-1005.0
267.162	-1651.0	653.7	-7359.1	703596.0	6284389.0	5586.0
267.163	-2048.0	687.0	-8480.8	746708.0	7571730.0	7216.0
267.164	1354.1	-2669.0	4515.2	-2901000.0	-4046668.0	-4081.0
267.165	957.3	-2569.6	3925.7	-2790000.0	-2759277.0	-2453.0
267.166	-1832.8	-487.0	-7866.6	-510624.0	6669294.0	4105.0
267.167	-2229.7	-453.5	-8988.3	-467342.0	7957660.0	5735.0
267.168	1542.1	118.9	7592.3	62366.0	-4385001.0	-2667.0
267.169	1145.7	252.6	7005.0	208759.0	-3098508.0	-1041.0
267.170	-1658.3	1092.2	-7236.2	1180000.0	6374538.0	5565.0
267.171	-2054.9	1129.5	-8378.6	1227000.0	7661981.0	7194.0
267.268	616.6	-1201.3	1436.8	-1325000.0	-1464661.0	-3000.0
267.269	-707.1	-883.7	-415.9	-970646.0	2830715.0	2429.0
267.270	-157.3	-329.9	-611.0	-372526.0	1177117.0	-902.0
267.271	-1479.8	-123.2	-4116.3	-129411.0	5467797.0	4529.0
267.272	808.7	28.1	3056.0	-28496.0	-1950954.0	-1509.0
267.273	-515.8	353.7	881.0	333025.0	2347219.0	3921.0
267.274	30.5	447.3	117.8	443246.0	704577.3	604.0
267.275	-1292.5	621.7	-3785.8	652403.0	4997287.0	6035.0
267.276	705.4	-1154.6	1893.1	-1273000.0	-1744146.0	-3171.0
267.277	-617.6	-829.4	-8.5	-909301.9	2549408.0	2255.0
267.278	-250.0	-409.6	-1121.9	-460236.0	1468613.0	-718.0
267.279	-1572.2	-171.1	-4501.1	-184460.0	5758369.0	4710.0
267.280	898.4	92.8	3477.2	43490.0	-2233211.0	-1682.0
267.281	-425.3	402.0	1247.6	388096.0	2062165.0	3745.0
267.282	-61.8	393.3	-346.0	382468.0	994330.6	786.0
267.283	-1383.4	566.3	-4233.9	590116.0	5282239.0	6214.0
267.284	620.1	-1939.2	734.9	-2113000.0	-1542774.0	-2967.0
267.285	-703.9	-1621.7	-1119.6	-1758000.0	2753526.0	2462.0
267.286	-153.4	-1067.6	-1367.1	-1161000.0	1097106.0	-869.0
267.287	-1475.4	-742.0	-4411.7	-796253.0	5385913.0	4559.0
267.288	803.7	594.0	3479.2	581710.0	-1867222.0	-1538.0

267.289	-521.8	790.1	1001.7	808237.0	2433698.0	3896.0
267.290	23.7	887.9	228.5	923508.0	794085.1	581.0
267.291	-1299.3	1074.0	-3688.1	1145000.0	5086563.0	6012.0
267.292	709.7	-1889.0	1135.9	-2056000.0	-1825056.0	-3140.0
267.293	-614.3	-1569.1	-703.3	-1699000.0	2471244.0	2289.0
267.294	-245.8	-1147.1	-2004.4	-1247000.0	1387678.0	-687.0
267.295	-1567.8	-818.8	-4782.3	-881969.1	5677485.0	4741.0
267.296	893.2	640.5	3866.1	634540.0	-2149529.0	-1711.0
267.297	-431.7	837.9	1359.0	862766.0	2149543.0	3721.0
267.298	-68.1	832.0	-229.4	860983.0	1082733.0	762.0
267.299	-1389.7	1026.0	-4144.9	1091000.0	5370642.0	6189.0
272.1	-30176.8	989.3	-15116.8	-422861.0	3628673.0	2625.0
272.2	-63290.3	1074.7	-19980.9	-451945.0	3592745.0	-8518.0
272.3	-26585.2	1975.7	-26185.9	-843578.0	9759323.0	19566.0
272.4	-59698.9	2063.1	-31056.3	-874305.9	9723344.0	8420.0
272.5	-23219.9	759.8	-11644.3	-324806.0	2781594.0	1994.0
272.6	-56333.5	844.9	-16508.5	-353609.0	2746641.0	-9148.0
272.7	-19628.4	1746.6	-22713.9	-745798.0	8903220.0	18934.0
272.8	-52742.1	1833.4	-27585.5	-776002.0	8867241.0	7789.0
272.9	-96404.0	1157.7	-24852.3	-479047.0	3556765.0	-19656.0
272.10	-27662.6	1679.7	-22865.7	-717279.0	7916148.0	14483.0
272.11	-93890.1	1849.4	-32607.9	-774512.0	7844166.0	-7798.0
272.12	-89447.2	927.7	-21384.9	-380499.0	2710663.0	-20285.0
272.13	-20705.8	1450.5	-19393.3	-619439.0	7070045.0	13852.0
272.14	-86933.3	1619.2	-29137.6	-675898.0	6998062.0	-8428.0
272.15	-60776.3	1765.9	-27734.5	-747018.0	7880170.0	3339.0
272.16	-53819.5	1536.6	-24262.7	-649090.0	7034066.0	2708.0
272.17	-15273.1	949.6	-12912.6	-408495.0	3650506.0	7667.0
272.18	-48386.5	1037.1	-17773.5	-439274.0	3611603.0	-3481.0
272.19	-11681.4	1936.7	-23981.1	-829719.1	9778181.0	24606.0
272.20	-44795.0	2025.0	-28845.2	-861220.0	9742228.0	13458.0
272.21	-8316.2	720.3	-9440.6	-310551.0	2802428.0	7035.0
272.22	-41429.6	807.4	-14300.9	-340980.0	2765525.0	-4111.0
272.23	-4724.6	1706.7	-20507.0	-731227.0	8932077.0	23976.0
272.24	-37838.1	1795.8	-25373.3	-763279.0	8896149.0	12826.0
272.25	-81500.2	1120.5	-22641.1	-466704.0	3575624.0	-14619.0
272.26	-12758.8	1639.9	-20658.5	-702851.0	7935006.0	19525.0
272.27	-78986.2	1812.3	-30396.4	-762245.0	7863049.0	-2763.0
272.28	-74543.3	890.7	-19170.3	-368362.0	2729546.0	-15250.0
272.29	-5802.0	1411.2	-17187.6	-605378.0	7091903.0	18892.0
272.30	-72029.4	1582.5	-26925.7	-663866.0	7016946.0	-3393.0
272.31	-5337.2	923.7	-11445.1	-399286.0	3664753.0	11026.0
272.32	-38450.6	1012.0	-16302.3	-430704.0	3630851.0	-123.0
272.33	-2822.9	1614.2	-19189.6	-693797.0	7953254.0	22884.0
272.34	-35936.5	1702.3	-24051.8	-725131.0	7918301.0	11736.0
272.35	1619.6	693.5	-7970.5	-300614.0	2816650.0	10397.0
272.36	-31493.8	782.3	-12829.8	-332498.0	2784747.0	-753.0
272.37	4133.9	1385.8	-15719.8	-596608.0	7106150.0	22251.0
272.38	-28979.7	1473.4	-20579.0	-627445.0	7072197.0	11105.0
272.39	-45872.4	1728.0	-25525.0	-734085.0	7899053.0	8377.0
272.40	-38915.6	1499.1	-22052.1	-636501.0	7052949.0	7745.0
272.41	-36138.3	1004.9	-15999.5	-428384.0	3617134.0	609.0
272.42	-69251.9	1089.7	-20864.1	-456974.0	3581181.0	-10533.0
272.43	-32546.7	1992.0	-27070.9	-849707.0	9747784.0	17549.0
272.44	-65660.4	2078.0	-31940.9	-879288.9	9711805.0	6405.0
272.45	-29181.5	775.3	-12527.0	-330261.0	2771031.0	-22.0
272.46	-62295.0	859.7	-17392.1	-358529.0	2735103.0	-11163.0
272.47	-25589.9	1762.2	-23596.6	-751395.0	8901681.0	16918.0
272.48	-58703.6	1848.2	-28470.3	-780940.0	8865702.0	5775.0
272.49	-102400.0	1172.3	-25736.5	-483801.0	3536480.0	-21670.0

272.50	-33624.2	1695.3	-23748.8	-722897.0	7904585.0	12467.0
272.51	-99851.7	1864.1	-33492.4	-779377.0	7832602.0	-9813.0
272.52	-95408.8	942.6	-22271.0	-385492.0	2699099.0	-22300.0
272.53	-26667.3	1466.3	-20275.9	-625144.0	7058506.0	11836.0
272.54	-92894.8	1634.0	-30023.4	-680762.0	6986523.0	-10442.0
272.55	-66737.9	1780.8	-28618.6	-752027.0	7868606.0	1325.0
272.56	-59781.1	1551.5	-25147.1	-654060.0	7022503.0	694.0
272.57	-40112.7	1015.2	-16588.2	-432019.0	3609425.0	-735.0
272.58	-73226.2	1099.5	-21453.1	-460216.0	3573497.0	-11875.0
272.59	-37598.5	1705.6	-24337.9	-726493.0	7906900.0	11124.0
272.60	-70712.2	1790.8	-29208.3	-755368.0	7870921.0	-18.0
272.61	-33155.8	785.6	-13115.7	-333875.0	2763347.0	-1366.0
272.62	-66269.4	869.3	-17981.9	-361563.0	2727394.0	-12505.0
272.63	-30641.7	1476.7	-20864.7	-628897.0	7050797.0	10492.0
272.64	-63755.4	1561.4	-25736.6	-657368.0	7014818.0	-649.0
272.108	-17679.2	692.6	-31613.6	38205.0	-1526561.0	41972.0
272.109	-21701.5	1595.4	-34771.3	-436594.0	241584.9	48877.0
272.110	-13584.2	1201.6	-28627.3	-505546.0	8375726.0	51109.0
272.111	-17612.0	2115.9	-31470.0	-986819.1	10134480.0	57991.0
272.112	-25939.4	-253.0	-15642.0	341305.0	356065.3	-39006.0
272.113	-29959.3	640.2	-19337.7	-127614.0	2129820.0	-32099.0
272.114	-21845.6	-546.0	-8144.6	455702.0	10261050.0	-28651.0
272.115	-25870.2	353.4	-11729.9	-18073.0	12020610.0	-21727.0
272.116	-17608.9	734.4	-31585.5	-26059.0	-687736.6	42059.0
272.117	-21626.8	1645.9	-34752.5	-509431.0	1090525.0	48974.0
272.118	-13653.5	1086.2	-28823.5	-380547.0	7538156.0	50778.0
272.119	-17679.9	2006.8	-31654.7	-867013.0	9307262.0	57669.0
272.120	-25869.5	-228.4	-15743.5	290692.0	1194788.0	-38910.0
272.121	-29889.6	664.5	-19430.1	-178215.0	2971492.0	-31991.0
272.122	-21929.3	-605.9	-8022.2	530382.0	9389826.0	-29049.0
272.123	-25954.4	296.3	-11512.3	55173.0	11149260.0	-22119.0
272.124	-17645.0	364.9	-44896.7	4546000.0	-1642890.0	49762.0
272.125	-21667.5	1270.0	-48012.5	4070000.0	125205.4	56680.0
272.126	-13549.2	816.4	-40930.3	4054000.0	8264600.0	58996.0
272.127	-17571.6	1724.3	-43767.3	3580000.0	10034720.0	65893.0
272.128	-25979.7	-939.3	-16499.4	-3368000.0	456847.1	-44755.0
272.129	-29999.0	-51.3	-20145.1	-3834000.0	2232754.0	-37868.0
272.130	-21881.2	-1226.5	-9085.5	-3258000.0	10372020.0	-34429.0
272.131	-25905.2	-329.5	-12738.8	-3730000.0	12131740.0	-27501.0
272.132	-17569.7	420.6	-44825.1	4468000.0	-791797.4	49919.0
272.133	-21589.0	1337.1	-47928.8	3982000.0	983109.3	56860.0
272.134	-13619.1	730.2	-41132.0	4153000.0	7426878.0	58679.0
272.135	-17644.9	1650.6	-43996.0	3667000.0	9186136.0	65567.0
272.136	-25894.4	-932.5	-16448.4	-3397000.0	1329475.0	-44554.0
272.137	-29918.5	-39.0	-20135.4	-3869000.0	3094164.0	-37662.0
272.138	-21961.9	-1282.4	-9047.2	-3187000.0	9511560.0	-34793.0
272.139	-25988.2	-385.8	-12610.6	-3657000.0	11270690.0	-27880.0
272.140	-25354.5	211.0	-25376.1	424667.0	-12434630.0	2674.0
272.141	-29374.7	1174.4	-29140.7	-99896.0	-10660960.0	9445.0
272.142	-11652.3	864.5	-14599.8	-540692.0	20695560.0	34608.0
272.143	-15679.8	1718.8	-17669.1	-975188.0	22454390.0	41620.0
272.144	-27819.0	95.5	-24674.2	381697.0	-11839510.0	-22018.0
272.145	-31839.1	1060.4	-28437.5	-144093.0	-10066800.0	-15249.0
272.146	-14138.8	159.9	-6874.5	-109780.0	21245110.0	11149.0
272.147	-18166.3	1014.2	-9943.8	-544301.0	23003930.0	18160.0
272.148	-25346.7	91.7	-28576.6	1795000.0	-12474660.0	5066.0
272.149	-29369.4	990.6	-31754.8	1323000.0	-10706610.0	11966.0
272.150	-11634.5	1067.4	-17487.9	575008.0	20680070.0	36252.0
272.151	-15663.3	1921.1	-20540.5	140781.0	22438570.0	43274.0
272.152	-27825.6	183.5	-25181.6	-963836.1	-11796180.0	-24387.0

272.153	-31844.3	1148.7	-28952.1	-1489000.0	-10020120.0	-17628.0
272.154	-14153.0	-35.3	-4078.8	-1231000.0	21271510.0	9464.0
272.155	-18180.2	832.7	-7224.3	-1677000.0	23030410.0	16449.0
272.156	-25125.7	357.8	-25719.0	202656.0	-9647621.0	2911.0
272.157	-29143.8	1323.0	-29493.0	-322868.0	-7870342.0	9666.0
272.158	-11921.9	650.7	-15518.2	-280943.0	17827200.0	33059.0
272.159	-15951.0	1503.6	-18564.8	-714637.0	19575620.0	40085.0
272.160	-27588.2	238.1	-25041.7	163292.0	-9048988.0	-21810.0
272.161	-31606.3	1203.3	-28815.7	-362240.0	-7271112.0	-15055.0
272.162	-14408.0	-41.4	-7693.8	140020.0	18366850.0	9604.0
272.163	-18437.1	811.8	-10742.0	-293974.0	20125270.0	16629.0
272.164	-25120.8	219.0	-28400.1	1588000.0	-9694379.0	5378.0
272.165	-29141.3	1121.5	-31623.2	1114000.0	-7922264.0	12258.0
272.166	-11907.3	842.6	-18442.1	842870.0	17800900.0	34723.0
272.167	-15935.5	1694.1	-21480.5	410752.0	19559550.0	41751.0
272.168	-27590.0	323.6	-25585.3	-1179000.0	-8995445.0	-24224.0
272.169	-31608.1	1288.8	-29359.3	-1705000.0	-7217741.0	-17469.0
272.170	-14427.2	-239.9	-4739.7	-979538.9	18381980.0	7976.0
272.171	-18454.8	616.1	-7818.7	-1416000.0	20140790.0	14985.0
272.268	-15886.9	-483.7	-17065.6	539125.0	-2950124.0	5124.0
272.269	-29291.7	2525.1	-27641.7	-1046000.0	2953090.0	28155.0
272.270	-11768.6	-76.4	-14112.8	76192.0	7006072.0	14302.0
272.271	-25195.4	2856.8	-23946.9	-1441000.0	12861710.0	37500.0
272.272	-18360.6	-657.6	-12672.5	543505.0	-2376330.0	-19392.0
272.273	-31758.9	2445.1	-25171.2	-1118000.0	3537531.0	3349.0
272.274	-14255.0	-722.7	-6409.1	461376.0	7555645.0	-9304.0
272.275	-27677.0	2262.3	-17019.9	-1101000.0	13412500.0	13796.0
272.276	-15820.4	-445.6	-16988.8	476988.0	-2119263.0	5229.0
272.277	-29216.6	2577.3	-27612.6	-1119000.0	3802131.0	28254.0
272.278	-11851.4	-172.6	-14499.9	179388.0	6140078.0	13911.0
272.279	-25270.2	2789.9	-24133.7	-1358000.0	12012740.0	37092.0
272.280	-18290.0	-615.5	-12793.3	478875.0	-1535430.0	-19342.0
272.281	-31689.7	2468.2	-25253.0	-1167000.0	4375077.0	3463.0
272.282	-14337.2	-776.7	-6506.3	530759.0	6684803.0	-9760.0
272.283	-27760.3	2199.6	-17025.4	-1024000.0	12551380.0	13405.0
272.284	-15877.3	-584.2	-21054.6	1894000.0	-2986690.0	7471.0
272.285	-29281.4	2427.1	-31619.7	306496.0	2915701.0	30508.0
272.286	-11762.2	-167.0	-18065.6	1424000.0	6962695.0	16628.0
272.287	-25185.0	2881.7	-27388.1	-183762.0	12824340.0	39559.0
272.288	-18368.5	-741.5	-13049.5	-665380.0	-2336333.0	-21399.0
272.289	-31770.5	2237.1	-25407.3	-2229000.0	3574590.0	1619.0
272.290	-14267.2	-954.0	-6227.5	-629516.0	7582552.0	-10972.0
272.291	-27687.9	2062.8	-17334.1	-2219000.0	13449730.0	12057.0
272.292	-15807.2	-544.5	-21026.2	1831000.0	-2147916.0	7552.0
272.293	-29208.5	2479.7	-31571.9	233292.0	3764185.0	30625.0
272.294	-11841.8	-265.5	-18382.9	1530000.0	6102512.0	16240.0
272.295	-25259.5	2788.5	-27670.4	-80408.0	11975450.0	39236.0
272.296	-18298.4	-717.0	-13149.3	-716228.0	-1496559.0	-21308.0
272.297	-31700.6	2261.4	-25486.3	-2279000.0	4412313.0	1747.0
272.298	-14349.8	-1015.5	-6229.2	-554135.0	6721609.0	-11409.0
272.299	-27768.9	2004.0	-17248.5	-2143000.0	12589200.0	11665.0
274.1	-1274.2	-240.1	36.5	-243009.0	4668927.0	723.0
274.2	-3245.5	-289.6	44.8	-294208.0	10517100.0	2417.0
274.3	-1978.0	-477.7	65.4	-480942.0	5928478.0	-1680.0
274.4	-3949.3	-525.9	73.7	-530705.0	11778660.0	14.0
274.5	-978.9	-184.5	28.4	-186826.0	3588800.0	553.0
274.6	-2950.3	-234.2	36.7	-238254.0	9441952.0	2247.0
274.7	-1682.7	-421.9	57.3	-424568.0	4848352.0	-1851.0
274.8	-3654.0	-470.5	65.7	-474692.0	10703530.0	-157.0
274.9	-5216.9	-340.4	53.4	-346777.0	16377260.0	4111.0

274.10	-1766.8	-406.5	56.7	-409579.0	5550028.0	-959.0
274.11	-5709.5	-505.9	73.7	-512388.0	17252360.0	2429.0
274.12	-4921.6	-285.1	45.4	-290891.0	15292130.0	3940.0
274.13	-1471.6	-350.7	48.6	-353260.0	4469876.0	-1130.0
274.14	-5414.2	-450.7	65.7	-456593.0	16177230.0	2258.0
274.15	-3738.2	-455.4	65.0	-460157.0	11402180.0	735.0
274.16	-3442.9	-399.7	57.0	-403894.0	10327050.0	564.0
274.17	-385.8	-219.4	32.9	-221561.0	2036181.0	-32.0
274.18	-2357.1	-267.6	41.1	-271476.0	7889357.0	1662.0
274.19	-1089.6	-456.7	61.9	-459142.0	3295732.0	-2435.0
274.20	-3061.0	-504.3	70.1	-508417.0	9147884.0	-741.0
274.21	-90.5	-163.7	24.9	-165269.0	955648.8	-202.0
274.22	-2061.9	-212.2	33.1	-215497.0	6808206.0	1492.0
274.23	-794.3	-401.3	53.8	-403229.0	2214605.0	-2605.0
274.24	-2765.7	-448.6	62.0	-452135.0	8067757.0	-911.0
274.25	-4328.5	-318.3	49.6	-323905.0	13742510.0	3356.0
274.26	-878.5	-385.8	53.1	-388199.0	2917256.0	-1714.0
274.27	-4821.1	-483.8	69.9	-489469.0	14627610.0	1674.0
274.28	-4033.2	-262.9	41.6	-267910.0	12657380.0	3186.0
274.29	-583.2	-329.8	45.1	-331597.0	1837130.0	-1884.0
274.30	-4525.9	-428.4	61.9	-433508.0	13542460.0	1503.0
274.31	206.5	-205.3	30.6	-206946.0	280745.1	-535.0
274.32	-1764.9	-253.1	38.7	-256412.0	6133510.0	1159.0
274.33	-286.2	-371.6	50.8	-373502.0	1162434.0	-2217.0
274.34	-2257.6	-419.5	58.9	-423007.0	7015585.0	-523.0
274.35	501.8	-150.1	22.5	-151190.0	-799618.6	-705.0
274.36	-1469.6	-197.6	30.6	-200357.0	5053383.0	989.0
274.37	9.1	-315.4	42.7	-316679.0	82044.3	-2387.0
274.38	-1962.3	-363.6	50.9	-366566.0	5934459.0	-693.0
274.39	-2849.8	-433.7	61.4	-437709.0	8770433.0	-20.0
274.40	-2554.5	-377.8	53.3	-381183.0	7690306.0	-190.0
274.41	-1629.5	-248.5	37.9	-251725.0	5721840.0	1025.0
274.42	-3600.9	-298.4	46.3	-303324.0	11576990.0	2719.0
274.43	-2333.3	-485.7	66.8	-489207.0	6981392.0	-1378.0
274.44	-4304.7	-534.7	75.2	-539824.0	12838540.0	316.0
274.45	-1334.2	-193.0	29.8	-195596.0	4641714.0	854.0
274.46	-3305.6	-243.1	38.2	-247439.0	10491870.0	2548.0
274.47	-2038.1	-430.3	58.8	-433227.0	5901240.0	-1549.0
274.48	-4009.4	-479.3	67.2	-483853.0	11753420.0	145.0
274.49	-5572.2	-349.4	54.9	-356064.0	17427170.0	4413.0
274.50	-2122.2	-414.8	58.1	-418237.0	6603917.0	-657.0
274.51	-6064.8	-514.8	75.2	-521587.0	18312270.0	2731.0
274.52	-5276.9	-293.9	46.9	-299999.0	16352040.0	4242.0
274.53	-1826.9	-359.0	50.1	-361855.0	5522790.0	-828.0
274.54	-5769.6	-459.6	67.2	-465786.0	17227120.0	2560.0
274.55	-4093.5	-464.2	66.5	-469264.0	12452090.0	1037.0
274.56	-3798.2	-408.5	58.5	-413022.0	11376970.0	866.0
274.57	-1866.4	-254.2	38.8	-257564.0	6423774.0	1226.0
274.58	-3837.8	-304.3	47.3	-309476.0	12276930.0	2920.0
274.59	-2359.1	-420.5	59.1	-424118.0	7305850.0	-456.0
274.60	-4330.4	-470.0	67.5	-475328.0	13162030.0	1238.0
274.61	-1571.1	-198.6	30.8	-201455.0	5343648.0	1056.0
274.62	-3542.5	-249.2	39.2	-253726.0	11191800.0	2750.0
274.63	-2063.8	-364.6	51.0	-367612.0	6225724.0	-626.0
274.64	-4035.1	-414.4	59.5	-419113.0	12076900.0	1067.0
274.108	-1046.3	-2346.1	4528.2	-2568000.0	-51261.4	591.0
274.109	-1398.2	-2360.1	5981.5	-2581000.0	935486.3	-441.0
274.110	-2158.8	-2216.9	-4409.2	-2188000.0	3362636.0	4326.0
274.111	-2509.6	-2206.1	-2963.6	-2179000.0	4345691.0	3289.0
274.112	-14.4	1330.7	3366.7	1297000.0	3847349.0	-4107.0



274.113	-366.7	1307.9	4817.2	1274000.0	4835023.0	-5139.0
274.114	-1126.6	909.3	-5876.5	1060000.0	7260351.0	-378.0
274.115	-1478.1	901.4	-4436.0	1053000.0	8245228.0	-1413.0
274.116	-1141.2	-2357.9	2205.0	-2522000.0	200473.7	1024.0
274.117	-1493.9	-2359.8	3652.0	-2519000.0	1189222.0	-5.3
274.118	-2063.9	-2186.6	-2213.8	-2224000.0	3111698.0	3896.0
274.119	-2415.1	-2183.1	-754.3	-2222000.0	4095652.0	2859.0
274.120	-109.2	1309.8	1041.5	1334000.0	4098313.0	-3674.0
274.121	-461.5	1285.7	2491.5	1310000.0	5085987.0	-4706.0
274.122	-1029.1	959.9	-3560.2	1052000.0	7000072.0	-816.0
274.123	-1380.5	953.9	-2116.3	1046000.0	7984974.0	-1851.0
274.124	-1063.5	-4586.0	7047.1	-4977000.0	-103755.4	543.0
274.125	-1415.3	-4598.3	8497.2	-4989000.0	882150.7	-489.0
274.126	-2176.0	-4467.3	-1962.9	-4624000.0	3311275.0	4280.0
274.127	-2527.9	-4455.9	-556.0	-4617000.0	4297051.0	3246.0
274.128	4.2	2914.9	965.7	3012000.0	3897065.0	-4066.0
274.129	-348.4	2889.5	2412.6	2988000.0	4884664.0	-5097.0
274.130	-1109.1	2486.2	-8333.3	2773000.0	7312788.0	-334.0
274.131	-1460.7	2476.1	-6894.8	2764000.0	8297640.0	-1369.0
274.132	-1159.3	-4585.1	4717.4	-4913000.0	151489.5	981.0
274.133	-1511.7	-4585.0	6167.1	-4909000.0	1139709.0	-50.0
274.134	-2081.2	-4458.5	312.4	-4677000.0	3059312.0	3847.0
274.135	-2432.5	-4454.2	1771.6	-4674000.0	4043240.0	2811.0
274.136	-93.6	2886.2	-1472.8	3034000.0	4158268.0	-3623.0
274.137	-445.2	2863.3	3.4	3014000.0	5143120.0	-4657.0
274.138	-1012.1	2532.0	-6002.5	2761000.0	7055382.0	-770.0
274.139	-1363.2	2527.3	-4578.1	2756000.0	8038361.0	-1806.0
274.140	613.1	-927.2	14611.2	-1338000.0	-2674549.0	-5427.0
274.141	260.8	-904.2	16058.8	-1313000.0	-1686874.0	-6458.0
274.142	-3105.2	-1301.6	-15449.6	-971015.1	8737677.0	7045.0
274.143	-3456.1	-1332.4	-13998.7	-1003000.0	9723706.0	6009.0
274.144	919.9	288.9	14293.5	-61390.0	-1496759.0	-6829.0
274.145	567.6	312.8	15741.1	-35779.0	-508966.0	-7860.0
274.146	-2793.9	-492.0	-15878.8	-129983.0	9901606.0	5631.0
274.147	-3144.8	-522.6	-14428.0	-162346.0	10882640.0	4594.0
274.148	608.4	-1612.0	15356.8	-2073000.0	-2691740.0	-5442.0
274.149	256.6	-1628.4	16806.4	-2088000.0	-1704939.0	-6475.0
274.150	-3112.0	-1763.7	-14713.2	-1475000.0	8725952.0	7035.0
274.151	-3462.6	-1795.8	-13261.8	-1509000.0	9712058.0	5998.0
274.152	924.3	960.8	13552.9	658063.0	-1478644.0	-6814.0
274.153	571.7	985.8	14999.8	684949.0	-490268.5	-7844.0
274.154	-2787.9	-22.5	-16616.8	382161.0	9913128.0	5643.0
274.155	-3138.9	-45.1	-15166.2	357938.0	10894130.0	4606.0
274.156	298.1	-960.7	6859.7	-1177000.0	-1838417.0	-3986.0
274.157	-54.6	-935.2	8306.4	-1150000.0	-849850.9	-5016.0
274.158	-2781.8	-1124.8	-7753.5	-988154.0	7876675.0	5586.0
274.159	-3132.4	-1157.5	-6303.3	-1023000.0	8858780.0	4548.0
274.160	604.5	256.3	6542.7	100132.0	-659738.0	-5387.0
274.161	251.7	281.8	7989.4	127565.0	329011.5	-6418.0
274.162	-2470.6	-309.9	-8182.6	-141541.0	9041580.0	4172.0
274.163	-2821.2	-342.6	-6731.0	-176056.0	10024680.0	3135.0
274.164	294.0	-1661.0	7605.2	-1929000.0	-1857456.0	-4002.0
274.165	-58.2	-1673.5	9053.9	-1940000.0	-870135.6	-5034.0
274.166	-2788.0	-1594.0	-7015.9	-1500000.0	7863103.0	5573.0
274.167	-3138.7	-1626.4	-5573.1	-1535000.0	8846183.0	4537.0
274.168	607.8	931.6	5801.2	823579.0	-639022.3	-5370.0
274.169	255.1	957.2	7248.0	851012.0	349751.6	-6400.0
274.170	-2463.6	152.3	-8918.1	363113.0	9052354.0	4182.0
274.171	-2814.5	122.6	-7467.2	331648.0	10036380.0	3145.0
274.268	-272.9	-890.8	2320.8	-1041000.0	156568.2	146.0

274.269	-1446.3	-949.5	7199.7	-1094000.0	3446291.0	-3293.0
274.270	-1389.9	-873.1	-6635.9	-785870.0	3584591.0	3894.0
274.271	-2559.2	-919.7	-1811.5	-836201.0	6861115.0	438.0
274.272	35.8	281.6	2004.0	192761.0	1329077.0	-1260.0
274.273	-1138.9	292.0	6836.1	205969.0	4622232.0	-4698.0
274.274	-1078.6	-21.2	-7069.2	99704.0	4749521.0	2479.0
274.275	-2248.9	-44.2	-2238.8	73055.0	8027792.0	-975.0
274.276	-367.0	-906.9	-3.4	-999230.0	405890.2	578.0
274.277	-1542.1	-947.5	4868.8	-1031000.0	3701001.0	-2857.0
274.278	-1292.5	-841.4	-4326.1	-813586.0	3325287.0	3455.0
274.279	-2463.4	-879.8	470.0	-856986.1	6606405.0	3.1
274.280	-59.1	272.7	-321.5	242347.0	1581015.0	-827.0
274.281	-1233.5	270.8	4496.9	241867.0	4873246.0	-4265.0
274.282	-981.3	35.0	-4759.8	97976.0	4490192.0	2041.0
274.283	-2151.4	-3.1	93.6	56472.0	7768513.0	-1414.0
274.284	-277.9	-1563.6	3068.4	-1765000.0	140431.4	132.0
274.285	-1451.4	-1622.3	7954.2	-1818000.0	3429998.0	-3307.0
274.286	-1394.2	-1532.3	-5881.2	-1497000.0	3566501.0	3878.0
274.287	-2564.4	-1501.1	-1067.9	-1468000.0	6844796.0	424.0
274.288	40.5	840.0	1274.8	794269.0	1346269.0	-1246.0
274.289	-1133.5	766.1	6114.3	719635.0	4636601.0	-4685.0
274.290	-1073.0	435.6	-7803.7	596467.0	4763941.0	2492.0
274.291	-2243.6	431.3	-2976.1	589249.0	8044135.0	-962.0
274.292	-372.7	-1576.5	744.4	-1719000.0	392009.9	565.0
274.293	-1546.8	-1622.8	5625.8	-1758000.0	3683809.0	-2873.0
274.294	-1297.4	-1499.1	-3596.6	-1524000.0	3309044.0	3441.0
274.295	-2468.7	-1488.6	1225.1	-1517000.0	6591061.0	-11.0
274.296	-54.3	819.1	-1049.5	831145.0	1597232.0	-813.0
274.297	-1228.2	743.8	3780.5	754957.0	4888590.0	-4252.0
274.298	-975.7	486.9	-5493.9	589852.0	4504612.0	2053.0
274.299	-2146.5	484.4	-678.2	582612.0	7785755.0	-1398.0
276.1	-1289.9	257.0	38.2	261116.0	4629946.0	-723.0
276.2	-3278.9	317.4	49.3	324137.0	10478640.0	-2438.0
276.3	-1992.6	492.5	65.8	496982.0	5862776.0	1686.0
276.4	-3981.7	554.5	77.0	561681.0	11710440.0	-29.0
276.5	-991.0	197.5	29.7	200741.0	3558732.0	-552.0
276.6	-2980.0	257.6	40.8	263488.0	9404421.0	-2268.0
276.7	-1693.7	433.2	57.3	436780.0	4791563.0	1857.0
276.8	-3682.8	494.8	68.4	501054.0	10636230.0	142.0
276.9	-5268.0	376.3	60.3	385656.0	16314300.0	-4153.0
276.10	-1781.8	421.8	57.6	426203.0	5493225.0	964.0
276.11	-5760.0	542.2	79.7	551860.0	17179550.0	-2467.0
276.12	-4969.1	316.4	51.8	324879.0	15250080.0	-3983.0
276.13	-1482.9	362.5	49.1	365952.0	4421011.0	1134.0
276.14	-5461.1	482.3	71.2	491017.0	16105340.0	-2296.0
276.15	-3770.9	483.1	68.6	490124.0	11333890.0	-752.0
276.16	-3472.0	423.5	60.1	429697.0	10269670.0	-581.0
276.17	-393.6	229.4	33.3	232326.0	2001203.0	41.0
276.18	-2382.6	291.2	44.5	296795.0	7844892.0	-1674.0
276.19	-1096.3	465.2	61.0	468469.0	3233033.0	2451.0
276.20	-3085.3	527.8	72.1	533759.0	9077722.0	736.0
276.21	-94.7	170.0	24.8	172049.0	929723.8	212.0
276.22	-2083.7	231.5	36.0	236172.0	6773678.0	-1503.0
276.23	-797.4	405.5	52.5	407851.0	2161819.0	2621.0
276.24	-2786.5	468.4	63.6	473476.0	8006483.0	906.0
276.25	-4371.7	350.3	55.5	358474.0	13691560.0	-3389.0
276.26	-885.5	394.2	52.7	397322.0	2863482.0	1728.0
276.27	-4863.6	516.2	74.8	524736.0	14556830.0	-1703.0
276.28	-4072.8	290.5	47.0	297839.0	12617340.0	-3219.0
276.29	-586.6	335.0	44.2	337316.0	1792268.0	1899.0

276.30	-4564.7	456.5	66.3	464055.0	13482620.0	-1532.0
276.31	204.0	211.3	30.1	213408.0	248359.2	551.0
276.32	-1785.0	273.6	41.2	278453.0	6092414.0	-1164.0
276.33	-287.9	376.1	49.5	378455.0	1111003.0	2238.0
276.34	-2277.0	438.5	60.6	443535.0	6955667.0	522.0
276.35	502.9	151.4	21.6	152648.0	-822931.8	722.0
276.36	-1486.1	214.0	32.7	217929.0	5021199.0	-994.0
276.37	11.0	317.2	41.0	318642.0	39741.1	2408.0
276.38	-1978.1	379.2	52.1	383393.0	5883453.0	693.0
276.39	-2874.5	456.5	63.8	462386.0	8708170.0	13.0
276.40	-2575.6	397.4	55.3	402321.0	7636956.0	183.0
276.41	-1648.4	267.9	40.2	272510.0	5682048.0	-1029.0
276.42	-3637.5	327.8	51.3	335049.0	11527710.0	-2744.0
276.43	-2351.1	503.8	67.8	508794.0	6913879.0	1381.0
276.44	-4340.2	564.9	78.9	572586.0	12759540.0	-335.0
276.45	-1349.5	208.4	31.7	212083.0	4610835.0	-858.0
276.46	-3338.6	268.0	42.7	274340.0	10453500.0	-2573.0
276.47	-2052.3	444.2	59.3	448239.0	5842640.0	1551.0
276.48	-4041.3	505.2	70.4	511923.0	11685330.0	-164.0
276.49	-5626.6	386.5	62.3	396406.0	17373380.0	-4459.0
276.50	-2140.3	432.8	59.5	437661.0	6544327.0	658.0
276.51	-6118.5	552.5	81.6	562672.0	18228650.0	-2773.0
276.52	-5327.7	326.8	53.8	335771.0	16299160.0	-4289.0
276.53	-1841.4	373.5	51.0	377466.0	5473113.0	829.0
276.54	-5819.6	492.6	73.1	501829.0	17164440.0	-2602.0
276.55	-4129.4	493.5	70.6	501037.0	12392990.0	-1057.0
276.56	-3830.5	434.0	62.1	440589.0	11318780.0	-887.0
276.57	-1887.4	275.1	41.5	280079.0	6382450.0	-1232.0
276.58	-3876.5	334.7	52.5	342263.0	12227110.0	-2948.0
276.59	-2379.3	440.0	60.8	445201.0	7245728.0	454.0
276.60	-4368.4	500.5	71.9	508315.0	13092390.0	-1261.0
276.61	-1588.5	215.6	33.0	219627.0	5311236.0	-1062.0
276.62	-3577.6	274.8	44.0	281444.0	11152900.0	-2777.0
276.63	-2080.4	380.8	52.3	385118.0	6174515.0	625.0
276.64	-4069.5	440.9	63.4	447843.0	12018180.0	-1091.0
276.108	-96.7	-2389.5	680.6	-2426000.0	4285482.0	3666.0
276.109	-436.8	-2265.9	2143.7	-2313000.0	5214249.0	4686.0
276.110	-1009.3	-1484.5	-3774.8	-1588000.0	7151092.0	844.0
276.111	-1349.1	-1374.5	-2325.8	-1491000.0	8078936.0	1865.0
276.112	-1204.9	1456.7	2353.6	1592000.0	51460.6	-1055.0
276.113	-1545.7	1535.1	3817.7	1657000.0	983087.8	-39.0
276.114	-2123.2	1722.3	-1982.3	1747000.0	2936663.0	-3900.0
276.115	-2462.7	1794.9	-507.6	1812000.0	3862583.0	-2877.0
276.116	-2.4	-2399.7	3021.3	-2375000.0	4033392.0	4104.0
276.117	-342.4	-2276.3	4484.2	-2263000.0	4962185.0	5124.0
276.118	-1106.6	-1464.6	-6103.3	-1629000.0	7411422.0	400.0
276.119	-1446.5	-1353.7	-4654.7	-1531000.0	8339240.0	1422.0
276.120	-1110.6	1442.3	4692.3	1639000.0	-200588.6	-618.0
276.121	-1450.6	1531.7	6164.8	1719000.0	728200.4	402.0
276.122	-2217.4	1765.2	-4211.5	1722000.0	3187778.0	-4335.0
276.123	-2556.6	1831.0	-2753.3	1780000.0	4113774.0	-3312.0
276.124	-138.4	-4830.1	-2150.5	-5016000.0	4129909.0	3562.0
276.125	-478.0	-4712.4	-689.3	-4910000.0	5056803.0	4583.0
276.126	-1048.6	-3951.3	-6580.1	-4216000.0	6988128.0	745.0
276.127	-1388.6	-3839.6	-5131.9	-4117000.0	7915921.0	1766.0
276.128	-1177.0	2992.6	5123.7	3269000.0	250443.7	-987.0
276.129	-1516.7	3068.1	6601.1	3337000.0	1177441.0	34.0
276.130	-2095.0	3298.9	798.9	3480000.0	3132813.0	-3826.0
276.131	-2434.3	3370.5	2274.7	3544000.0	4058783.0	-2803.0
276.132	-41.7	-4849.9	252.9	-4979000.0	3869427.0	4007.0

276.133	-381.8	-4728.0	1716.4	-4869000.0	4798195.0	5027.0
276.134	-1145.9	-3928.9	-8909.0	-4255000.0	7248457.0	302.0
276.135	-1485.9	-3815.8	-7460.3	-4154000.0	8176250.0	1323.0
276.136	-1081.7	2988.9	7467.0	3332000.0	-5515.0	-545.0
276.137	-1421.3	3072.3	8944.0	3408000.0	921629.4	476.0
276.138	-2189.3	3311.1	-1541.9	3430000.0	3384903.0	-4265.0
276.139	-2528.8	3384.7	-68.4	3496000.0	4311823.0	-3243.0
276.140	580.8	-1848.3	6251.6	-1723000.0	-545327.1	5328.0
276.141	241.0	-1691.4	7718.6	-1576000.0	382366.6	6348.0
276.142	-2471.1	387.2	-8143.6	221814.0	9038452.0	-4116.0
276.143	-2810.6	434.3	-6683.0	258787.0	9967373.0	-3093.0
276.144	250.8	-554.9	6726.7	-373258.0	-1823410.0	3919.0
276.145	-88.9	-397.1	8193.9	-225248.0	-895915.6	4939.0
276.146	-2805.9	1181.9	-7580.4	1050000.0	7776564.0	-5540.0
276.147	-3145.5	1229.0	-6122.2	1087000.0	8703459.0	-4518.0
276.148	568.9	-2591.8	5419.3	-2514000.0	-594057.4	5298.0
276.149	228.8	-2468.9	6882.8	-2402000.0	334747.3	6317.0
276.150	-2479.5	-76.4	-8976.0	-286232.0	8979323.0	-4137.0
276.151	-2819.2	-30.7	-7515.8	-250893.0	9905192.0	-3115.0
276.152	262.1	169.1	7561.7	398517.0	-1773545.0	3948.0
276.153	-77.3	327.4	9029.2	547209.0	-846316.4	4969.0
276.154	-2796.8	1652.8	-6747.6	1566000.0	7833871.0	-5517.0
276.155	-3136.5	1705.4	-5297.0	1609000.0	8760741.0	-4496.0
276.156	894.0	-1863.0	14055.7	-1535000.0	-1382326.0	6785.0
276.157	554.7	-1704.3	15523.5	-1386000.0	-456268.8	7806.0
276.158	-2792.6	556.0	-15888.9	187425.0	9901936.0	-5590.0
276.159	-3132.4	601.1	-14429.0	222210.0	10825780.0	-4568.0
276.160	564.4	-559.9	14533.3	-175336.0	-2661896.0	5378.0
276.161	225.1	-401.2	16001.1	-26159.0	-1735926.0	6399.0
276.162	-3127.2	1346.9	-15325.1	1011000.0	8637098.0	-7015.0
276.163	-3467.0	1392.0	-13865.1	1046000.0	9560942.0	-5994.0
276.164	881.7	-2626.7	13219.7	-2347000.0	-1430445.0	6754.0
276.165	542.1	-2500.7	14684.2	-2232000.0	-502663.5	7774.0
276.166	-2801.7	91.8	-16723.0	-321301.0	9839629.0	-5612.0
276.167	-3141.5	136.7	-15263.2	-286771.0	10773470.0	-4591.0
276.168	576.6	173.4	15371.3	606242.0	-2614803.0	5409.0
276.169	237.3	332.1	16839.1	755419.0	-1687833.0	6430.0
276.170	-3119.1	1806.6	-14493.3	1515000.0	8697152.0	-6995.0
276.171	-3458.6	1854.5	-13032.5	1553000.0	9623072.0	-5973.0
276.268	-85.1	-991.5	-484.0	-953305.9	1711423.0	831.0
276.269	-1218.4	-583.8	4379.4	-581239.0	4806075.0	4230.0
276.270	-999.0	-121.7	-4809.7	-167199.0	4581704.0	-1998.0
276.271	-2131.2	118.8	69.5	38952.0	7672635.0	1409.0
276.272	-416.1	273.7	-16.3	365650.0	436821.9	-580.0
276.273	-1550.1	690.3	4911.1	744853.0	3533972.0	2815.0
276.274	-1333.9	739.9	-4250.6	728071.0	3319790.0	-3422.0
276.275	-2466.5	967.5	598.0	927105.0	6411619.0	-18.0
276.276	8.5	-1003.3	1855.5	-904668.0	1462155.0	1267.0
276.277	-1124.3	-593.4	6737.6	-531202.0	4554934.0	4667.0
276.278	-1096.0	-97.4	-7134.2	-204300.0	4842110.0	-2441.0
276.279	-2228.0	163.1	-2271.6	22480.0	7931091.0	966.0
276.280	-321.8	274.9	2326.1	427910.0	184468.6	-142.0
276.281	-1455.0	688.3	7256.7	806603.0	3279085.0	3255.0
276.282	-1430.5	789.3	-6571.3	716165.0	3578297.0	-3865.0
276.283	-2561.8	997.9	-1705.8	893932.0	6666456.0	-457.0
276.284	-96.9	-1725.8	-1313.5	-1734000.0	1662431.0	802.0
276.285	-1230.4	-1320.0	3552.2	-1364000.0	4758032.0	4200.0
276.286	-1010.3	-848.3	-5644.3	-941019.1	4531839.0	-2027.0
276.287	-2141.9	-503.1	-800.9	-629243.0	7619921.0	1381.0
276.288	-405.9	852.6	815.0	990579.0	490491.0	-554.0

276.289	-1540.9	1157.3	5746.5	1257000.0	3591305.0	2839.0
276.290	-1325.4	1193.2	-3438.1	1228000.0	3378945.0	-3401.0
276.291	-2458.0	1442.7	1432.8	1449000.0	6470774.0	4.3
276.292	-2.6	-1736.1	1026.2	-1683000.0	1410341.0	1240.0
276.293	-1136.2	-1329.8	5905.7	-1314000.0	4505917.0	4638.0
276.294	-1107.0	-826.2	-7965.2	-979137.0	4790321.0	-2469.0
276.295	-2238.8	-480.7	-3116.7	-670338.0	7879353.0	939.0
276.296	-311.7	837.8	3156.0	1037000.0	238681.4	-116.0
276.297	-1446.1	1152.8	8091.5	1316000.0	3337342.0	3277.0
276.298	-1421.5	1240.3	-5738.0	1212000.0	3636579.0	-3842.0
276.299	-2552.8	1469.4	-878.6	1413000.0	6723738.0	-435.0
354.1	-128.3	-8.2	-46.2	21227.0	1207470.0	-1045.0
354.2	-832.4	-7.0	-78.9	25671.0	2722945.0	-485.0
354.3	-742.0	-31.3	-18.4	26943.0	3318866.0	-2835.0
354.4	-1446.1	-28.8	-47.5	32770.0	4834342.0	-2274.0
354.5	-97.4	-6.3	-36.2	16333.0	924423.3	-802.0
354.6	-801.5	-5.3	-68.2	20526.0	2439780.0	-242.0
354.7	-711.1	-29.2	-8.8	22216.0	3036701.0	-2592.0
354.8	-1415.2	-27.1	-34.0	27645.0	4552176.0	-2031.0
354.9	-1536.5	-7.5	-104.6	28411.0	4238421.0	76.0
354.10	-557.9	-24.4	-25.9	25228.0	2685545.0	-2298.0
354.11	-1966.1	-22.8	-79.7	33263.0	5716496.0	-1177.0
354.12	-1505.6	-6.0	-91.7	23044.0	3955255.0	319.0
354.13	-527.0	-22.3	-16.4	20451.0	2402379.0	-2055.0
354.14	-1935.2	-21.4	-66.7	27788.0	5433330.0	-934.0
354.15	-1262.0	-22.7	-61.7	30215.0	4201020.0	-1737.0
354.16	-1231.1	-20.7	-45.8	25385.0	3917855.0	-1495.0
354.17	188.1	-10.0	-28.5	18005.0	525851.8	-1299.0
354.18	-516.1	-7.4	-64.5	23899.0	2041143.0	-739.0
354.19	-425.7	-32.7	-3.7	24115.0	2638064.0	-3089.0
354.20	-1129.8	-29.5	-33.8	30599.0	4153539.0	-2528.0
354.21	219.0	-8.0	-18.0	13181.0	243171.4	-1056.0
354.22	-485.2	-5.6	-54.0	18797.0	1758978.0	-496.0
354.23	-394.8	-31.1	7.4	18775.0	2354899.0	-2846.0
354.24	-1098.9	-27.5	-23.2	25748.0	3870374.0	-2285.0
354.25	-1220.2	-7.6	-94.3	26908.0	3556618.0	-178.0
354.26	-241.6	-26.1	-10.2	22013.0	2003742.0	-2552.0
354.27	-1649.7	-22.8	-69.7	31845.0	5034719.0	-1431.0
354.28	-1189.3	-5.8	-80.9	21777.0	3274453.0	65.0
354.29	-210.7	-23.8	-1.3	17526.0	1721577.0	-2309.0
354.30	-1618.8	-21.2	-55.9	26631.0	4752553.0	-1188.0
354.31	399.0	-10.9	-17.0	16116.0	71687.5	-1468.0
354.32	-305.2	-7.7	-53.9	22617.0	1587617.0	-908.0
354.33	-30.7	-26.8	-0.4	20334.0	1550216.0	-2721.0
354.34	-734.8	-23.9	-33.7	26560.0	3065692.0	-2161.0
354.35	429.9	-9.5	-6.7	10669.0	-211005.9	-1226.0
354.36	-274.3	-5.9	-43.9	17590.0	1304451.0	-665.0
354.37	0.2	-24.3	8.0	16083.0	1267056.0	-2478.0
354.38	-703.9	-21.7	-22.7	21960.0	2782526.0	-1918.0
354.39	-945.7	-23.3	-46.3	28185.0	3520218.0	-1991.0
354.40	-914.8	-21.0	-34.3	23656.0	3237053.0	-1749.0
354.41	-254.9	-7.7	-53.7	22340.0	1479370.0	-944.0
354.42	-959.0	-6.9	-84.4	26339.0	2994846.0	-383.0
354.43	-868.6	-30.3	-24.5	28548.0	3591767.0	-2733.0
354.44	-1572.7	-28.7	-51.4	33422.0	5107242.0	-2173.0
354.45	-224.0	-5.8	-44.3	17386.0	1197205.0	-701.0
354.46	-928.1	-5.3	-74.0	21104.0	2712680.0	-140.0
354.47	-837.7	-28.6	-14.3	23379.0	3308601.0	-2490.0
354.48	-1541.8	-27.1	-38.7	28242.0	4824077.0	-1930.0
354.49	-1663.0	-7.6	-109.3	28821.0	4510347.0	177.0



354.50	-684.5	-23.8	-32.8	26392.0	2957445.0	-2196.0
354.51	-2092.6	-22.9	-83.5	33763.0	5988421.0	-1075.0
354.52	-1632.1	-5.9	-96.6	23659.0	4228181.0	420.0
354.53	-653.6	-21.6	-22.4	21731.0	2675280.0	-1953.0
354.54	-2061.7	-21.5	-71.2	28284.0	5706256.0	-832.0
354.55	-1388.6	-22.6	-65.9	30880.0	4472921.0	-1636.0
354.56	-1357.6	-20.6	-49.8	26015.0	4190781.0	-1393.0
354.57	-339.2	-7.4	-58.8	23044.0	1660996.0	-876.0
354.58	-1043.3	-6.9	-88.6	26694.0	3176471.0	-315.0
354.59	-768.8	-23.5	-38.0	27047.0	3140071.0	-2129.0
354.60	-1472.9	-22.5	-68.4	31327.0	4654546.0	-1568.0
354.61	-308.3	-5.5	-49.3	18072.0	1378831.0	-633.0
354.62	-1012.4	-5.5	-79.1	21295.0	2894306.0	-73.0
354.63	-737.9	-21.2	-26.5	22523.0	2856906.0	-1886.0
354.64	-1442.0	-20.6	-52.5	26425.0	4372381.0	-1325.0
354.108	579.1	-2010.5	1761.2	-1971000.0	-591871.2	-1970.0
354.109	178.1	-2009.3	2069.1	-1912000.0	741184.3	-3606.0
354.110	-384.4	-1623.3	-2486.0	-1811000.0	2633535.0	-4459.0
354.111	-784.3	-1613.5	-2505.2	-1746000.0	3963141.0	-6093.0
354.112	95.8	1211.1	-11134.6	1416000.0	-414295.9	3057.0
354.113	-305.6	1205.8	-10865.5	1470000.0	920249.1	1421.0
354.114	-867.0	1122.2	-10858.4	1070000.0	2810172.0	577.0
354.115	-1267.6	1110.7	-10726.5	1119000.0	4141600.0	-1059.0
354.116	488.6	-1908.2	1333.5	-1974000.0	-307424.5	-2146.0
354.117	86.7	-1906.1	1658.7	-1914000.0	1028983.0	-3785.0
354.118	-293.9	-1739.9	-2027.6	-1821000.0	2349482.0	-4280.0
354.119	-694.0	-1729.0	-2046.4	-1754000.0	3679036.0	-5915.0
354.120	5.5	1303.8	-11563.5	1404000.0	-130163.5	2881.0
354.121	-396.0	1298.2	-11298.3	1458000.0	1204594.0	1243.0
354.122	-773.7	1025.4	-10238.9	1077000.0	2516828.0	761.0
354.123	-1174.2	1016.5	-10179.5	1128000.0	3848282.0	-876.0
354.124	657.0	-4126.3	1699.8	-4220000.0	-1194418.0	-1862.0
354.125	256.0	-4123.4	1982.0	-4160000.0	138386.8	-3499.0
354.126	-306.8	-3777.1	-3252.3	-4107000.0	2031211.0	-4354.0
354.127	-707.8	-3763.1	-3247.8	-4037000.0	3364538.0	-5991.0
354.128	20.2	2635.4	-22013.9	2967000.0	184159.7	2970.0
354.129	-381.5	2621.1	-21782.3	3013000.0	1519271.0	1331.0
354.130	-943.8	2585.1	-21435.1	2666000.0	3412700.0	485.0
354.131	-1344.5	2571.6	-21247.7	2714000.0	4744102.0	-1152.0
354.132	565.2	-4019.4	1276.5	-4218000.0	-906693.6	-2044.0
354.133	163.6	-4015.1	1556.5	-4155000.0	428469.8	-3682.0
354.134	-216.2	-3892.1	-2793.1	-4116000.0	1746182.0	-4175.0
354.135	-616.5	-3879.2	-2789.3	-4048000.0	3077686.0	-5810.0
354.136	-73.6	2735.4	-22547.4	2964000.0	478808.8	2783.0
354.137	-474.2	2720.6	-22284.0	3009000.0	1810767.0	1147.0
354.138	-851.2	2486.6	-20781.5	2673000.0	3120178.0	668.0
354.139	-1251.4	2475.5	-20659.7	2721000.0	4450708.0	-967.0
354.140	1535.3	-1090.2	6324.1	-719828.0	-4295725.0	2691.0
354.141	1133.9	-1047.8	6277.1	-617303.0	-2961500.0	1053.0
354.142	-1686.7	-421.8	-8513.9	-840234.9	6489337.0	-5623.0
354.143	-2086.7	-458.3	-8633.2	-820196.0	7818917.0	-7258.0
354.144	1387.3	-12.5	-2089.6	415584.0	-4233250.0	4188.0
354.145	985.8	30.9	-2130.7	519131.0	-2899051.0	2550.0
354.146	-1829.8	278.7	-8971.8	-104721.0	6537055.0	-4107.0
354.147	-2229.8	242.2	-9091.2	-84730.0	7866635.0	-5741.0
354.148	1559.1	-1736.9	7030.7	-1408000.0	-4478690.0	2724.0
354.149	1158.2	-1737.1	7358.5	-1350000.0	-3145339.0	1088.0
354.150	-1665.2	-856.4	-8310.2	-1311000.0	6313789.0	-5600.0
354.151	-2064.8	-895.1	-8445.0	-1294000.0	7642471.0	-7234.0
354.152	1363.2	608.9	-6601.7	1080000.0	-4050361.0	4155.0

354.153	961.5	654.7	-6612.8	1186000.0	-2715212.0	2516.0
354.154	-1852.2	723.3	-9140.2	377335.0	6715375.0	-4133.0
354.155	-2252.2	695.4	-9278.1	406239.0	8045955.0	-5767.0
354.156	1235.0	-749.0	4464.2	-729886.0	-3351866.0	2107.0
354.157	833.1	-702.3	4467.0	-622536.0	-2015768.0	467.0
354.158	-1376.9	-761.6	-6773.6	-829516.0	5515887.0	-5008.0
354.159	-1776.5	-801.2	-6913.6	-812876.0	6844569.0	-6641.0
354.160	1086.6	328.6	-3861.7	405710.0	-3288493.0	3602.0
354.161	684.7	375.4	-3858.8	513067.0	-1952394.0	1962.0
354.162	-1520.1	-52.3	-7238.9	-84783.0	5564579.0	-3491.0
354.163	-1919.7	-91.9	-7378.9	-68231.0	6893260.0	-5125.0
354.164	1259.5	-1410.9	5512.8	-1434000.0	-3536654.0	2142.0
354.165	858.1	-1405.4	5865.0	-1370000.0	-2202429.0	504.0
354.166	-1354.7	-1208.1	-6600.0	-1313000.0	5338516.0	-4982.0
354.167	-1754.4	-1247.3	-6740.6	-1296000.0	6667172.0	-6616.0
354.168	1061.5	955.5	-8233.2	1077000.0	-3101857.0	3565.0
354.169	659.6	1002.3	-8230.3	1184000.0	-1765758.0	1925.0
354.170	-1541.3	382.9	-7467.6	386693.0	5739204.0	-3513.0
354.171	-1941.3	347.5	-7590.5	407814.0	7068784.0	-5148.0
354.268	879.6	-731.2	1556.7	-702611.0	-2090977.0	1701.0
354.269	-457.6	-729.9	2643.2	-506985.0	2353976.0	-3756.0
354.270	-88.7	-391.1	-2321.8	-592474.0	1149510.0	-800.0
354.271	-1421.5	-459.3	-2685.4	-472026.0	5580579.0	-6247.0
354.272	733.6	303.5	-3483.8	384365.0	-2034996.0	3205.0
354.273	-604.9	378.4	-2994.7	657733.0	2414628.0	-2255.0
354.274	-231.8	347.2	-3236.2	181413.0	1197227.0	717.0
354.275	-1565.5	311.9	-3259.3	338431.0	5631068.0	-4732.0
354.276	790.0	-635.7	1082.7	-713181.0	-1809696.0	1528.0
354.277	-549.1	-624.7	2228.5	-506684.0	2641776.0	-3935.0
354.278	4.6	-516.3	-1838.9	-613325.0	856272.3	-613.0
354.279	-1329.8	-559.6	-2178.1	-467155.0	5292830.0	-6065.0
354.280	643.1	407.4	-3974.7	383217.0	-1749942.0	3028.0
354.281	-695.2	472.5	-3459.0	646862.0	2698732.0	-2432.0
354.282	-138.6	249.9	-2598.0	189126.0	904500.0	903.0
354.283	-1472.2	206.9	-2735.4	337418.0	5337724.0	-4547.0
354.284	903.0	-1365.7	1547.0	-1377000.0	-2272044.0	1733.0
354.285	-434.3	-1364.1	2627.7	-1181000.0	2172883.0	-3724.0
354.286	-64.6	-1031.9	-2438.1	-1275000.0	966150.7	-766.0
354.287	-1398.2	-1017.2	-2692.2	-1071000.0	5399487.0	-6216.0
354.288	709.8	814.3	-7206.7	935793.0	-1853030.0	3174.0
354.289	-627.8	804.1	-6277.8	1122000.0	2594821.0	-2283.0
354.290	-254.6	769.8	-6227.6	642438.0	1377446.0	690.0
354.291	-1588.5	754.4	-6456.0	821355.9	5812236.0	-4760.0
354.292	812.6	-1263.8	1116.9	-1380000.0	-1987965.0	1557.0
354.293	-525.3	-1259.7	2203.6	-1182000.0	2459810.0	-3902.0
354.294	28.1	-1156.8	-1987.7	-1295000.0	675009.8	-582.0
354.295	-1306.6	-1134.5	-2202.8	-1084000.0	5111712.0	-6035.0
354.296	619.5	906.1	-7639.5	922168.0	-1567926.0	2997.0
354.297	-718.2	896.9	-6744.0	1110000.0	2878901.0	-2459.0
354.298	-161.3	668.2	-5524.0	645768.0	1084102.0	876.0
354.299	-1495.7	658.8	-5856.7	830208.0	5519765.0	-4576.0
357.1	5217.3	-120.9	34.5	-196627.0	-10647150.0	9807.0
357.2	7355.9	-152.8	45.0	-240551.0	-15624910.0	21068.0
357.3	6136.8	-265.0	75.5	-406835.0	-12524010.0	7475.0
357.4	8275.4	-296.0	85.9	-449654.0	-17511770.0	18736.0
357.5	4012.0	-92.6	26.5	-151103.0	-8184757.0	7541.0
357.6	6150.6	-124.8	37.0	-195240.0	-13170520.0	18803.0
357.7	4931.5	-236.6	67.4	-361145.0	-10069620.0	5209.0
357.8	7070.1	-268.0	77.9	-404360.0	-15047380.0	16471.0
357.9	9494.5	-186.3	55.9	-285923.0	-20612670.0	32329.0

357.10	5861.0	-221.8	63.2	-343763.0	-11963940.0	8175.0
357.11	10138.1	-286.7	84.6	-432472.0	-21929480.0	30697.0
357.12	8289.2	-158.4	48.0	-240740.0	-18148270.0	30064.0
357.13	4655.7	-193.4	55.1	-298116.0	-9499547.0	5909.0
357.14	8932.8	-258.9	76.7	-387331.0	-19465090.0	28432.0
357.15	7999.5	-253.4	73.7	-387265.0	-16941730.0	19436.0
357.16	6794.3	-225.2	65.7	-341733.0	-14487310.0	17170.0
357.17	4252.6	-108.1	30.2	-178576.0	-8408753.0	4719.0
357.18	6391.2	-138.9	40.4	-221258.0	-13389510.0	15981.0
357.19	5172.1	-251.8	71.1	-388370.0	-10288610.0	2388.0
357.20	7310.7	-282.3	81.3	-430667.0	-15276370.0	13649.0
357.21	3047.4	-79.8	22.2	-132951.0	-5950332.0	2454.0
357.22	5185.9	-110.8	32.4	-175917.0	-10935120.0	13715.0
357.23	3966.9	-223.9	63.1	-343131.0	-7832192.0	122.0
357.24	6105.4	-254.0	73.3	-385082.0	-12811980.0	11383.0
357.25	8529.8	-172.1	51.2	-266398.0	-18377270.0	27242.0
357.26	4896.3	-209.0	58.8	-325696.0	-9728543.0	3087.0
357.27	9173.4	-272.4	79.9	-412879.0	-19694080.0	25610.0
357.28	7324.5	-144.1	43.3	-221103.0	-15912870.0	24976.0
357.29	3691.0	-180.4	50.7	-279790.0	-7268147.0	821.0
357.30	7968.1	-244.5	72.0	-367623.0	-17229690.0	23344.0
357.31	3609.5	-99.3	27.3	-166239.0	-6918811.0	1328.0
357.32	5748.1	-129.7	37.4	-208498.0	-11902570.0	12589.0
357.33	4253.2	-200.1	55.9	-313240.0	-8236601.0	-305.0
357.34	6391.7	-230.6	66.1	-355683.0	-13219380.0	10957.0
357.35	2404.2	-71.5	19.3	-121095.0	-4460415.0	-938.0
357.36	4542.8	-101.6	29.4	-163086.0	-9438173.0	10323.0
357.37	3047.9	-171.2	47.7	-267130.0	-5778205.0	-2570.0
357.38	5186.5	-202.2	58.0	-309950.0	-10754960.0	8691.0
357.39	7034.9	-239.6	69.1	-368168.0	-14706300.0	14348.0
357.40	5829.6	-211.1	61.0	-322353.0	-12251910.0	12083.0
357.41	5603.2	-126.1	36.2	-203988.0	-11539310.0	11842.0
357.42	7741.8	-158.4	46.8	-248296.0	-16517070.0	23103.0
357.43	6522.7	-269.9	77.2	-413813.0	-13416170.0	9510.0
357.44	8661.3	-301.7	87.8	-457454.0	-18403930.0	20771.0
357.45	4397.9	-97.9	28.2	-158509.0	-9074912.0	9576.0
357.46	6536.5	-130.5	38.9	-203052.0	-14062670.0	20838.0
357.47	5317.4	-241.8	69.2	-368491.0	-10961770.0	7244.0
357.48	7456.0	-273.7	79.8	-412179.0	-15939530.0	18506.0
357.49	9880.3	-192.1	57.8	-293836.0	-21504850.0	34364.0
357.50	6246.9	-227.0	64.9	-351088.0	-12856100.0	10210.0
357.51	10524.0	-292.4	86.5	-440322.0	-22821640.0	32732.0
357.52	8675.0	-164.0	49.9	-248500.0	-19040450.0	32099.0
357.53	5041.6	-198.6	56.9	-305400.0	-10401700.0	7944.0
357.54	9318.7	-264.6	78.6	-395176.0	-20357240.0	30467.0
357.55	8385.4	-259.0	75.5	-395042.0	-17833880.0	21471.0
357.56	7180.1	-230.8	67.6	-349533.0	-15379490.0	19205.0
357.57	5860.5	-129.6	37.4	-208927.0	-12134070.0	13198.0
357.58	7999.0	-162.2	48.1	-253528.0	-17111850.0	24460.0
357.59	6504.1	-230.5	66.1	-356073.0	-13450890.0	11566.0
357.60	8642.7	-262.8	76.8	-400227.0	-18438640.0	22828.0
357.61	4655.2	-101.4	29.4	-163466.0	-9679674.0	10933.0
357.62	6793.7	-134.4	40.2	-208421.0	-14657460.0	22194.0
357.63	5298.8	-202.0	58.0	-310280.0	-10996490.0	9301.0
357.64	7437.4	-234.6	68.8	-354734.0	-15974250.0	20562.0
357.108	5204.8	-1310.1	3559.6	-1414000.0	-10970320.0	9018.0
357.109	5849.6	-1407.7	4537.8	-1527000.0	-12486830.0	11274.0
357.110	6181.3	-2636.3	-2986.4	-2965000.0	-13802730.0	6597.0
357.111	6826.1	-2698.1	-2009.3	-3049000.0	-15319240.0	8852.0
357.112	1935.3	2031.4	2224.8	2166000.0	-2561305.0	4368.0

357.113	2580.2	1931.8	3204.9	2050000.0	-4077790.0	6623.0
357.114	2912.9	461.4	-4476.4	335108.0	-5399435.0	1947.0
357.115	3557.9	369.9	-3490.7	230001.0	-6914895.0	4202.0
357.116	5266.0	-1705.8	1503.9	-1869000.0	-11174810.0	8852.0
357.117	5910.8	-1818.2	2543.2	-1992000.0	-12691320.0	11108.0
357.118	6119.4	-2178.8	-953.2	-2446000.0	-13588430.0	6763.0
357.119	6764.4	-2250.7	24.0	-2540000.0	-15104890.0	9018.0
357.120	1996.5	1631.5	172.0	1707000.0	-2771788.0	4201.0
357.121	2641.4	1529.2	1153.3	1589000.0	-4287273.0	6457.0
357.122	2851.1	897.9	-2443.2	830051.0	-5188104.0	2111.0
357.123	3496.0	810.1	-1458.7	726561.0	-6703589.0	4366.0
357.124	5170.2	-3308.3	5514.3	-3650000.0	-10899100.0	8850.0
357.125	5815.0	-3406.9	6501.1	-3764000.0	-12415610.0	11105.0
357.126	6146.8	-4576.4	-1082.6	-5157000.0	-13731480.0	6429.0
357.127	6791.6	-4625.6	-105.9	-5227000.0	-15247990.0	8685.0
357.128	1969.9	3480.5	344.2	3796000.0	-2629532.0	4533.0
357.129	2614.8	3374.6	1326.6	3677000.0	-4145018.0	6789.0
357.130	2947.4	1880.6	-6278.2	1946000.0	-5466687.0	2112.0
357.131	3592.3	1785.6	-5291.3	1839000.0	-6982173.0	4368.0
357.132	5231.1	-3728.6	3540.5	-4123000.0	-11113660.0	8684.0
357.133	5875.9	-3832.6	4568.3	-4240000.0	-12630170.0	10940.0
357.134	6085.3	-4161.0	951.2	-4682000.0	-13527070.0	6595.0
357.135	6730.2	-4232.7	1929.1	-4776000.0	-15043560.0	8851.0
357.136	2030.9	3107.6	-1706.3	3365000.0	-2839065.0	4368.0
357.137	2675.9	2993.6	-723.9	3238000.0	-4354526.0	6624.0
357.138	2885.5	2311.7	-4260.8	2437000.0	-5255382.0	2276.0
357.139	3530.5	2222.3	-3258.7	2334000.0	-6770842.0	4532.0
357.140	2921.9	1437.5	11054.4	1713000.0	-4719153.0	10216.0
357.141	3566.8	1379.4	12025.8	1640000.0	-6234638.0	12472.0
357.142	6179.1	-3239.6	-11290.9	-3786000.0	-14173290.0	2154.0
357.143	6824.0	-3346.5	-10303.3	-3912000.0	-15689780.0	4409.0
357.144	1941.3	2554.3	10584.6	2900000.0	-2197784.0	8824.0
357.145	2586.2	2497.0	11555.8	2827000.0	-3714269.0	11080.0
357.146	5198.2	-2427.8	-11711.0	-2919000.0	-11652000.0	757.0
357.147	5843.1	-2534.5	-10723.4	-3045000.0	-13168480.0	3012.0
357.148	2911.4	823.7	11654.3	1030000.0	-4698815.0	10165.0
357.149	3556.2	727.2	12634.3	918823.1	-6214326.0	12421.0
357.150	6169.0	-3646.1	-10757.2	-4254000.0	-14155850.0	2106.0
357.151	6813.9	-3754.4	-9769.1	-4382000.0	-15672340.0	4361.0
357.152	1951.8	3164.7	9982.9	3574000.0	-2218121.0	8875.0
357.153	2596.8	3108.6	10953.7	3502000.0	-3734581.0	11132.0
357.154	5208.4	-2013.7	-12246.8	-2444000.0	-11669410.0	806.0
357.155	5853.3	-2112.5	-11261.1	-2562000.0	-13185900.0	3061.0
357.156	3125.8	135.6	4206.4	214878.0	-5417454.0	9660.0
357.157	3770.8	80.0	5177.1	144026.0	-6933914.0	11917.0
357.158	5973.8	-1772.9	-4520.0	-2116000.0	-13475340.0	2703.0
357.159	6618.6	-1881.3	-3531.7	-2244000.0	-14991860.0	4957.0
357.160	2145.3	1253.6	3736.0	1403000.0	-2896059.0	8268.0
357.161	2790.3	1198.0	4706.7	1332000.0	-4412520.0	10525.0
357.162	4992.9	-957.9	-4940.5	-1245000.0	-10954050.0	1305.0
357.163	5637.7	-1066.7	-3952.2	-1373000.0	-12470560.0	3560.0
357.164	3115.3	-494.3	4810.5	-483991.0	-5397116.0	9608.0
357.165	3760.2	-587.0	5789.3	-591104.0	-6912602.0	11864.0
357.166	5963.6	-2185.2	-3984.8	-2590000.0	-13457930.0	2654.0
357.167	6608.4	-2291.0	-2996.7	-2715000.0	-14964440.0	4908.0
357.168	2156.0	1867.8	3132.8	2082000.0	-2917346.0	8321.0
357.169	2801.0	1812.2	4103.5	2011000.0	-4433806.0	10577.0
357.170	5002.9	-552.0	-5473.8	-778168.0	-10971520.0	1353.0
357.171	5647.7	-657.9	-4486.3	-903403.0	-12488030.0	3608.0
357.268	3308.1	83.9	2019.0	101444.0	-6257231.0	4758.0

357.269	5457.5	-240.9	5240.4	-275994.0	-11306250.0	12277.0
357.270	4285.2	-1249.4	-4696.2	-1467000.0	-9093488.0	2341.0
357.271	6434.7	-1553.9	-1414.0	-1833000.0	-14148480.0	9857.0
357.272	2327.2	1150.7	1563.0	1242000.0	-3734938.0	3364.0
357.273	4477.1	900.2	4810.3	937044.1	-8788831.0	10884.0
357.274	3304.4	-401.1	-5124.0	-560081.0	-6571170.0	944.0
357.275	5454.1	-682.1	-1848.1	-905104.0	-11627110.0	8461.0
357.276	3369.3	-312.8	-34.5	-354465.0	-6465714.0	4591.0
357.277	5518.8	-645.2	3238.1	-734947.0	-11520710.0	12111.0
357.278	4223.6	-827.5	-2661.0	-985013.0	-8883106.0	2505.0
357.279	6373.1	-1114.4	617.3	-1333000.0	-13934100.0	10023.0
357.280	2388.5	761.5	-492.0	794712.0	-3944396.0	3198.0
357.281	4538.4	497.6	2769.1	476076.0	-8999289.0	10718.0
357.282	3242.7	40.6	-3092.6	-57147.0	-6360814.0	1108.0
357.283	5392.4	-259.9	185.8	-423748.0	-11412760.0	8625.0
357.284	3297.7	-516.4	2613.4	-569411.0	-6236869.0	4708.0
357.285	5447.1	-841.8	5827.9	-947934.9	-11288890.0	12227.0
357.286	4274.8	-1829.2	-4125.8	-2119000.0	-9076124.0	2290.0
357.287	6424.4	-2058.8	-860.1	-2409000.0	-14121090.0	9807.0
357.288	2337.7	1659.6	982.9	1810000.0	-3755276.0	3415.0
357.289	4487.5	1332.7	4248.3	1425000.0	-8809195.0	10934.0
357.290	3314.7	9.6	-5661.7	-92397.0	-6591558.0	994.0
357.291	5464.4	-254.2	-2389.2	-419581.0	-11644500.0	8511.0
357.292	3359.0	-909.7	557.1	-1021000.0	-6446326.0	4541.0
357.293	5508.4	-1242.3	3812.2	-1404000.0	-11503350.0	12061.0
357.294	4213.2	-1400.7	-2090.3	-1629000.0	-8862743.0	2455.0
357.295	6362.8	-1643.7	1174.2	-1937000.0	-13916710.0	9973.0
357.296	2399.0	1259.6	-1069.8	1351000.0	-3964734.0	3248.0
357.297	4548.7	927.9	2206.0	961488.9	-9016677.0	10768.0
357.298	3253.0	446.0	-3628.6	405423.0	-6381202.0	1158.0
357.299	5402.6	189.8	-357.3	83907.0	-11430170.0	8675.0
372.1	3998.7	494.3	408.0	-23848.0	-1243130.0	-40982.0
372.2	5879.4	554.0	487.0	-13841.0	-1857278.0	-87099.0
372.3	4259.7	891.2	773.5	-24176.0	-1328953.0	-29584.0
372.4	6140.4	948.8	852.9	-13083.0	-1943102.0	-75702.0
372.5	3075.3	381.2	314.2	-18675.0	-956257.7	-31529.0
372.6	4956.0	441.2	393.1	-8859.0	-1570406.0	-77646.0
372.7	3336.4	777.8	679.8	-18894.0	-1041056.0	-20132.0
372.8	5217.1	836.1	759.1	-8126.0	-1656204.0	-66249.0
372.9	7760.1	615.5	565.6	-4880.0	-2472427.0	-133217.0
372.10	4181.4	772.1	663.9	-24067.0	-1302806.0	-33004.0
372.11	7942.8	892.0	821.7	-4438.0	-2532103.0	-125239.0
372.12	6836.7	502.7	471.7	44.0	-2185555.0	-123764.0
372.13	3258.1	658.8	570.1	-18805.0	-1015909.0	-23551.0
372.14	7019.4	779.2	727.7	503.0	-2245231.0	-115786.0
372.15	6062.1	830.6	743.0	-13465.0	-1917955.0	-79121.0
372.16	5138.7	717.7	649.2	-8386.0	-1631083.0	-69668.0
372.17	3171.0	468.4	372.7	-28609.0	-972993.0	-20289.0
372.18	5051.7	526.1	452.1	-17585.0	-1587141.0	-66406.0
372.19	3432.1	864.9	738.5	-28722.0	-1058791.0	-8892.0
372.20	5312.7	921.7	818.0	-17205.0	-1672965.0	-55009.0
372.21	2247.7	355.0	279.0	-23349.0	-686095.6	-10836.0
372.22	4128.4	413.3	358.3	-12589.0	-1300244.0	-56954.0
372.23	2508.7	751.8	644.5	-23672.0	-771919.1	561.0
372.24	4389.4	808.4	724.2	-11961.0	-1386068.0	-45556.0
372.25	6932.4	587.4	530.8	-8504.0	-2202290.0	-112524.0
372.26	3353.7	746.3	628.7	-28877.0	-1032669.0	-12311.0
372.27	7115.1	863.9	786.9	-8026.0	-2261967.0	-104546.0
372.28	6009.1	474.7	436.9	-3536.0	-1915393.0	-103071.0
372.29	2430.4	632.7	535.0	-23479.0	-745772.1	-2858.0



372.30	6191.8	751.2	693.0	-3067.0	-1975069.0	-95093.0
372.31	2619.3	450.6	349.3	-31552.0	-792876.5	-6493.0
372.32	4500.0	507.8	428.9	-20177.0	-1408025.0	-52611.0
372.33	2802.0	728.7	605.4	-31856.0	-852552.8	1485.0
372.34	4682.7	785.6	684.8	-20407.0	-1467702.0	-44633.0
372.35	1695.9	337.7	255.4	-26560.0	-505872.5	2959.0
372.36	3576.6	394.8	335.0	-15105.0	-1120153.0	-43158.0
372.37	1878.7	615.0	511.8	-26341.0	-565655.6	10937.0
372.38	3759.3	672.2	591.1	-15121.0	-1180830.0	-35180.0
372.39	5234.4	803.3	708.1	-17480.0	-1647818.0	-58428.0
372.40	4311.1	689.8	614.4	-12124.0	-1360921.0	-48976.0
372.41	4329.7	504.8	422.0	-22025.0	-1351205.0	-49259.0
372.42	6210.4	565.1	500.9	-12356.0	-1965353.0	-95376.0
372.43	4590.7	901.3	787.7	-22114.0	-1437028.0	-37862.0
372.44	6471.4	960.1	866.8	-11633.0	-2051177.0	-83979.0
372.45	3406.4	391.7	328.2	-16884.0	-1064307.0	-39806.0
372.46	5287.1	452.4	407.0	-7405.0	-1678456.0	-85924.0
372.47	3667.4	788.2	693.8	-17033.0	-1149131.0	-28409.0
372.48	5548.1	847.3	773.0	-6673.0	-1764279.0	-74527.0
372.49	8091.1	626.7	579.4	-3459.0	-2580502.0	-141494.0
372.50	4512.4	782.6	678.0	-22209.0	-1410881.0	-41281.0
372.51	8273.8	903.2	835.5	-2992.0	-2640178.0	-133516.0
372.52	7167.8	513.9	485.6	1525.0	-2293604.0	-132041.0
372.53	3589.1	669.3	584.2	-16953.0	-1123984.0	-31828.0
372.54	7350.5	790.4	741.6	1948.0	-2353281.0	-124063.0
372.55	6393.1	841.7	756.9	-11996.0	-2026030.0	-87398.0
372.56	5469.8	728.8	663.2	-6925.0	-1738132.0	-77946.0
372.57	4550.4	511.9	431.4	-20828.0	-1423246.0	-54777.0
372.58	6431.1	572.6	510.2	-11400.0	-2037395.0	-100895.0
372.59	4733.1	789.7	687.3	-21036.0	-1482923.0	-46799.0
372.60	6613.8	849.2	766.2	-11027.0	-2098071.0	-92917.0
372.61	3627.1	398.8	337.5	-15705.0	-1136349.0	-45324.0
372.62	5507.8	459.9	416.3	-6521.0	-1750497.0	-91442.0
372.63	3809.8	676.3	593.6	-15713.0	-1196025.0	-37346.0
372.64	5690.5	736.3	672.4	-5951.0	-1810174.0	-83464.0
372.108	4254.1	3064.9	-1096.0	-2066000.0	-1334373.0	-43893.0
372.109	4918.1	2871.9	-835.7	-1798000.0	-1562016.0	-54845.0
372.110	5807.1	1906.7	-708.8	-873737.0	-1841610.0	-31543.0
372.111	6470.9	1678.7	-460.8	-600321.0	-2069303.0	-42492.0
372.112	-109.9	619.9	1147.2	-6625.0	88494.9	-11422.0
372.113	554.4	378.3	1475.7	279243.0	-139408.9	-22379.0
372.114	1444.4	-255.3	1620.1	983547.0	-419418.4	892.0
372.115	2108.2	-307.5	1910.9	1199000.0	-647465.9	-10055.0
372.116	4059.0	4130.5	-935.5	-2698000.0	-1269841.0	-45134.0
372.117	4723.1	3940.0	-676.0	-2431000.0	-1497458.0	-56086.0
372.118	6002.7	829.3	-843.9	-230470.0	-1906015.0	-30302.0
372.119	6666.6	600.4	-595.9	43273.0	-2133684.0	-41250.0
372.120	-305.0	1697.9	1310.7	-644915.0	152772.3	-12662.0
372.121	359.1	1602.5	1585.6	-412499.0	-75063.2	-23615.0
372.122	1639.2	-1392.9	1507.4	1668000.0	-483608.9	2142.0
372.123	2303.0	-1452.5	1789.7	1882000.0	-711074.4	-8806.0
372.124	4240.9	5299.9	-2952.8	-3591000.0	-1329720.0	-43331.0
372.125	4904.9	5108.9	-2696.6	-3326000.0	-1557363.0	-54283.0
372.126	5793.4	3910.4	-2515.2	-2317000.0	-1837083.0	-30980.0
372.127	6457.4	3681.6	-2268.4	-2043000.0	-2064726.0	-41927.0
372.128	-94.2	-342.2	2923.7	869809.9	83405.6	-12010.0
372.129	569.7	-397.2	3220.9	1088000.0	-144412.6	-22959.0
372.130	1459.8	-838.1	3282.6	1724000.0	-424430.7	319.0
372.131	2123.6	-882.8	3575.6	1937000.0	-652561.3	-10627.0
372.132	4045.4	6378.1	-2787.4	-4222000.0	-1265289.0	-44563.0

372.133	4709.4	6186.5	-2529.2	-3955000.0	-1492932.0	-55514.0
372.134	5989.0	2829.5	-2649.0	-1672000.0	-1901489.0	-29736.0
372.135	6652.9	2598.5	-2400.5	-1397000.0	-2129157.0	-40684.0
372.136	-289.5	947.4	2988.9	148236.0	147725.3	-13240.0
372.137	374.4	883.0	3288.5	373226.0	-80086.9	-24193.0
372.138	1654.9	-1950.7	3143.6	2376000.0	-488699.1	1559.0
372.139	2318.7	-2007.7	3433.7	2593000.0	-716093.6	-9388.0
372.140	913.7	3111.1	-742.1	-2555000.0	-243812.4	-46885.0
372.141	1577.8	2891.8	-465.1	-2268000.0	-471624.8	-57837.0
372.142	6093.2	80.3	595.2	1036000.0	-1936069.0	-5775.0
372.143	6757.0	10.6	860.2	1246000.0	-2163763.0	-16723.0
372.144	-395.9	2113.4	-4.4	-1813000.0	183086.5	-37135.0
372.145	268.2	1893.2	272.9	-1526000.0	-44725.9	-48087.0
372.146	4784.4	-343.8	1264.1	1479000.0	-1509915.0	3956.0
372.147	5448.2	-413.4	1528.6	1689000.0	-1737609.0	-6992.0
372.148	909.6	3786.2	-1302.8	-3015000.0	-242454.9	-46715.0
372.149	1573.7	3597.3	-1040.9	-2749000.0	-470285.3	-57668.0
372.150	6088.6	282.4	110.2	808776.0	-1935236.0	-5602.0
372.151	6752.4	212.9	373.3	1018000.0	-2162929.0	-16550.0
372.152	-391.7	1488.2	556.1	-1375000.0	181708.5	-37303.0
372.153	272.3	1269.4	835.4	-1087000.0	-46108.3	-48255.0
372.154	4788.9	-548.5	1755.9	1710000.0	-1510774.0	3783.0
372.155	5452.7	-622.0	2021.7	1922000.0	-1738468.0	-7166.0
372.156	263.6	6639.6	-204.3	-4650000.0	-29583.2	-51023.0
372.157	927.6	6421.3	75.9	-4362000.0	-257391.0	-61975.0
372.158	6744.5	-3666.2	188.7	3267000.0	-2150932.0	-1641.0
372.159	7408.3	-3735.6	451.1	3476000.0	-2378626.0	-12589.0
372.160	-1046.1	5634.0	538.7	-3903000.0	397322.3	-41271.0
372.161	-382.1	5415.6	818.9	-3614000.0	169514.5	-52223.0
372.162	5435.7	-4088.9	856.6	3709000.0	-1723778.0	8089.0
372.163	6099.5	-4158.4	1119.0	3918000.0	-1952472.0	-2859.0
372.164	259.5	7329.6	-775.8	-5122000.0	-28258.8	-50854.0
372.165	923.5	7140.8	-510.0	-4853000.0	-256081.6	-61807.0
372.166	6740.0	-3464.7	-299.9	3039000.0	-2149073.0	-1467.0
372.167	7403.8	-3533.7	-37.9	3247000.0	-2376767.0	-12415.0
372.168	-1042.0	5005.3	1108.1	-3459000.0	395990.9	-41439.0
372.169	-378.0	4787.0	1388.3	-3171000.0	168183.1	-52390.0
372.170	5440.3	-4290.2	1338.4	3935000.0	-1725612.0	7915.0
372.171	6104.1	-4360.5	1603.7	4145000.0	-1953306.0	-3033.0
372.268	1951.4	1987.1	-557.8	-1461000.0	-570222.5	-19746.0
372.269	4164.8	1345.0	315.9	-570151.0	-1330015.0	-56251.0
372.270	3505.1	788.7	-142.0	-239647.0	-1078282.0	-7411.0
372.271	5717.7	422.2	748.5	526183.0	-1837277.0	-43902.0
372.272	641.9	983.0	154.0	-728480.0	-143345.3	-9998.0
372.273	2855.7	399.6	1082.3	164837.0	-902937.2	-46513.0
372.274	2196.3	254.2	530.5	255453.0	-651128.1	2321.0
372.275	4409.2	-18.7	1445.4	987883.0	-1410047.0	-34176.0
372.276	1756.4	3049.4	-401.9	-2094000.0	-505962.8	-20988.0
372.277	3969.9	2434.6	473.1	-1209000.0	-1265432.0	-57494.0
372.278	3700.5	-296.8	-269.9	409660.0	-1142738.0	-6171.0
372.279	5913.2	-708.9	613.6	1192000.0	-1901708.0	-42662.0
372.280	446.8	2037.0	319.8	-1353000.0	-79062.9	-11239.0
372.281	2660.4	1580.0	1200.7	-510280.0	-838455.6	-47751.0
372.282	2391.7	-871.6	407.3	925312.0	-715584.5	3560.0
372.283	4604.3	-1141.8	1316.4	1654000.0	-1474580.0	-32933.0
372.284	1947.3	2659.8	-1112.4	-1917000.0	-569262.1	-19575.0
372.285	4160.7	2002.8	-231.4	-1020000.0	-1328055.0	-56082.0
372.286	3500.9	1393.9	-669.6	-667830.0	-1076347.0	-7242.0
372.287	5713.5	823.6	215.1	184773.0	-1835342.0	-43735.0
372.288	646.3	578.5	690.6	-400130.0	-144759.6	-10169.0

372.289	2860.1	218.2	1579.6	388207.0	-904821.6	-46684.0
372.290	2200.9	81.6	1013.9	467495.0	-652961.8	2147.0
372.291	4413.8	-194.0	1945.9	1211000.0	-1411881.0	-34348.0
372.292	1752.2	3726.0	-951.6	-2550000.0	-504575.7	-20817.0
372.293	3965.7	3104.1	-81.6	-1665000.0	-1264497.0	-57323.0
372.294	3696.3	333.9	-790.2	-26215.0	-1140803.0	-6001.0
372.295	5909.0	-285.0	75.7	840328.0	-1899773.0	-42491.0
372.296	451.2	1653.4	853.3	-1036000.0	-80490.3	-11410.0
372.297	2665.0	1367.8	1712.9	-274743.0	-840289.3	-47925.0
372.298	2396.2	-1042.8	893.4	1139000.0	-717443.5	3389.0
372.299	4608.9	-1319.9	1813.8	1876000.0	-1476413.0	-33105.0
374.1	11664.1	-485.1	509.7	641828.0	-11882570.0	52.0
374.2	20029.8	-515.2	599.8	691344.0	-20561440.0	-1173.0
374.3	12057.2	-1010.4	950.8	1320000.0	-12502900.0	2473.0
374.4	20423.0	-1040.9	1040.3	1370000.0	-21181750.0	1248.0
374.5	8971.1	-372.3	392.5	492810.0	-9135377.0	40.0
374.6	17336.9	-402.3	482.6	542179.0	-17824230.0	-1185.0
374.7	9364.3	-897.7	833.4	1171000.0	-9765682.0	2462.0
374.8	17730.1	-927.8	923.1	1221000.0	-18444530.0	1237.0
374.9	28395.6	-544.1	689.7	739728.0	-29240300.0	-2398.0
374.10	11939.3	-852.8	818.5	1117000.0	-12322790.0	1747.0
374.11	28670.9	-911.9	998.0	1215000.0	-29680490.0	-703.0
374.12	25702.7	-430.9	572.3	590337.0	-26503080.0	-2410.0
374.13	9246.3	-740.1	701.2	967544.1	-9575601.0	1735.0
374.14	25977.9	-798.7	880.5	1065000.0	-26933300.0	-715.0
374.15	20305.0	-883.1	908.1	1166000.0	-21001670.0	522.0
374.16	17612.1	-770.2	790.9	1017000.0	-18254450.0	510.0
374.17	7909.3	-471.4	469.7	619607.0	-7987597.0	603.0
374.18	16275.0	-502.4	559.5	669993.0	-16673470.0	-622.0
374.19	8302.4	-997.0	910.7	1298000.0	-8614927.0	3025.0
374.20	16668.2	-1028.0	1000.3	1349000.0	-17293780.0	1800.0
374.21	5216.3	-358.6	352.3	470606.0	-5244407.0	592.0
374.22	13582.0	-389.5	442.3	520857.0	-13926280.0	-634.0
374.23	5609.5	-883.9	793.2	1149000.0	-5867712.0	3013.0
374.24	13975.2	-915.2	882.9	1199000.0	-14546590.0	1788.0
374.25	24640.8	-531.7	649.6	718655.0	-25352320.0	-1847.0
374.26	8184.5	-839.3	778.6	1094000.0	-8424820.0	2298.0
374.27	24916.0	-899.5	958.0	1194000.0	-25782550.0	-152.0
374.28	21947.8	-418.6	532.4	569418.0	-22605140.0	-1859.0
374.29	5491.5	-726.7	661.3	945473.1	-5680630.0	2287.0
374.30	22223.1	-786.4	840.7	1044000.0	-23045330.0	-163.0
374.31	5406.1	-462.3	442.8	604889.0	-5391283.0	971.0
374.32	13771.8	-493.8	532.7	655679.0	-14068160.0	-254.0
374.33	5681.3	-830.5	752.0	1080000.0	-5827506.0	2666.0
374.34	14047.0	-861.5	841.4	1130000.0	-14508380.0	1441.0
374.35	2713.2	-349.3	325.4	455636.0	-2648068.0	959.0
374.36	11078.8	-380.9	415.5	506593.0	-11330970.0	-266.0
374.37	2988.3	-717.8	634.7	930946.0	-3083317.0	2654.0
374.38	11354.0	-748.8	724.2	981421.0	-11761190.0	1429.0
374.39	16550.2	-870.2	868.0	1145000.0	-17103700.0	1073.0
374.40	13857.3	-757.6	750.8	995947.0	-14356480.0	1062.0
374.41	13166.0	-490.4	525.7	650612.0	-13441760.0	-169.0
374.42	21531.7	-520.3	615.9	699856.0	-22120640.0	-1394.0
374.43	13559.2	-1015.9	966.8	1329000.0	-14062060.0	2253.0
374.44	21924.9	-1045.9	1056.4	1378000.0	-22740940.0	1028.0
374.45	10473.0	-377.6	408.5	501571.0	-10694570.0	-180.0
374.46	18838.8	-407.3	498.6	550646.0	-19373420.0	-1405.0
374.47	10866.2	-903.0	849.4	1180000.0	-11324880.0	2241.0
374.48	19232.0	-932.8	939.1	1229000.0	-20003730.0	1016.0
374.49	29897.6	-549.0	705.6	748089.0	-30799460.0	-2619.0

374.50	13441.2	-858.2	834.5	1125000.0	-13871980.0	1526.0
374.51	30172.8	-916.8	1014.0	1223000.0	-31239690.0	-924.0
374.52	27204.6	-435.8	588.3	598763.0	-28062280.0	-2630.0
374.53	10748.2	-745.5	717.2	976388.0	-11134790.0	1515.0
374.54	27479.9	-803.6	896.5	1074000.0	-28492470.0	-935.0
374.55	21807.0	-888.1	924.2	1175000.0	-22560840.0	301.0
374.56	19114.0	-775.2	807.0	1026000.0	-19813650.0	290.0
374.57	14167.3	-493.9	536.4	656444.0	-14477880.0	-316.0
374.58	22533.0	-523.6	626.6	705490.0	-23156760.0	-1541.0
374.59	14442.5	-861.7	845.1	1131000.0	-14918110.0	1379.0
374.60	22808.3	-891.5	934.9	1180000.0	-23596950.0	154.0
374.61	11474.3	-381.1	419.1	507394.0	-11730690.0	-327.0
374.62	19840.1	-410.6	509.3	556196.0	-20419540.0	-1552.0
374.63	11749.5	-749.1	727.9	982251.9	-12170910.0	1368.0
374.64	20115.3	-778.5	817.7	1031000.0	-20849770.0	143.0
374.108	9401.3	954.1	1516.9	-1173000.0	-9896300.0	1487.0
374.109	11690.1	475.6	1912.4	-632650.0	-12315980.0	3111.0
374.110	11052.2	566.1	-695.6	-744091.0	-11637720.0	4255.0
374.111	13340.3	68.3	-311.4	-190621.0	-14047570.0	5880.0
374.112	4933.3	-907.5	1707.5	1372000.0	-4745162.0	-3852.0
374.113	7224.0	-1382.9	2140.2	1900000.0	-7159355.0	-2228.0
374.114	6599.3	-1274.8	-2932.9	1653000.0	-6497748.0	-1084.0
374.115	8886.6	-1697.5	-2258.7	2143000.0	-8906802.0	540.0
374.116	9347.2	1395.0	2072.9	-1453000.0	-9860017.0	1046.0
374.117	11636.0	919.3	2467.5	-914962.0	-12269690.0	2669.0
374.118	11111.3	115.4	-1233.7	-461334.0	-11682730.0	4698.0
374.119	13399.5	-381.8	-850.0	91974.0	-14092560.0	6323.0
374.120	4879.4	-462.3	2239.1	1087000.0	-4704828.0	-4293.0
374.121	7168.2	-917.6	2710.8	1602000.0	-7116503.0	-2669.0
374.122	6651.7	-1811.7	-3270.5	1998000.0	-6537462.0	-641.0
374.123	8938.8	-2231.0	-2587.1	2486000.0	-8943567.0	983.0
374.124	9204.3	1401.1	1469.7	-1804000.0	-9676250.0	1383.0
374.125	11492.2	920.6	1862.8	-1262000.0	-12096150.0	3006.0
374.126	10850.9	941.8	-796.5	-1335000.0	-11408760.0	4149.0
374.127	13139.2	446.4	-414.7	-782936.0	-13828560.0	5773.0
374.128	5160.1	-968.9	1377.2	1528000.0	-4995657.0	-3741.0
374.129	7448.0	-1389.0	2028.4	2017000.0	-7405560.0	-2117.0
374.130	6823.8	-1288.6	-3377.5	1780000.0	-6745826.0	-971.0
374.131	9111.0	-1706.7	-2716.5	2266000.0	-9159906.0	653.0
374.132	9145.2	1797.5	2000.7	-2056000.0	-9631234.0	941.0
374.133	11434.0	1318.0	2394.4	-1516000.0	-12050910.0	2564.0
374.134	10909.9	492.4	-1335.4	-1053000.0	-11463800.0	4593.0
374.135	13198.2	-3.5	-952.9	-499851.0	-13873600.0	6217.0
374.136	5103.4	-501.8	1739.7	1228000.0	-4951033.0	-4182.0
374.137	7391.4	-921.6	2391.9	1717000.0	-7361910.0	-2559.0
374.138	6877.6	-1744.3	-3714.1	2074000.0	-6786185.0	-530.0
374.139	9165.0	-2168.8	-3034.8	2565000.0	-9196214.0	1094.0
374.140	5905.9	803.1	4135.8	-756124.0	-6063559.0	-3600.0
374.141	8194.0	310.0	4539.1	-199687.0	-8472411.0	-1976.0
374.142	11433.8	-582.9	-7334.9	555769.0	-11880960.0	5625.0
374.143	13721.3	-1009.9	-6667.0	1046000.0	-14290960.0	7249.0
374.144	4559.9	230.9	4154.4	50893.0	-4511838.0	-5203.0
374.145	6848.0	-262.6	4557.8	607783.0	-6922690.0	-3579.0
374.146	10099.4	-1110.9	-7844.6	1218000.0	-10339300.0	4024.0
374.147	12387.0	-1536.2	-7175.9	1707000.0	-12749280.0	5648.0
374.148	5845.5	924.9	4110.4	-939290.1	-5995874.0	-3631.0
374.149	8134.4	447.1	4508.9	-400180.0	-8407523.0	-2008.0
374.150	11366.3	-562.9	-7212.3	506174.0	-11808080.0	5591.0
374.151	13654.2	-988.2	-6553.5	994840.1	-14217980.0	7216.0
374.152	4621.4	138.8	4185.7	209967.0	-4579244.0	-5171.0

374.153	6909.0	-356.3	4592.4	767756.0	-6990223.0	-3548.0
374.154	10165.6	-1136.0	-7936.6	1272000.0	-10412510.0	4057.0
374.155	12453.5	-1558.4	-7254.6	1761000.0	-12822420.0	5681.0
374.156	5727.9	2269.5	5979.0	-1684000.0	-5927691.0	-5068.0
374.157	8015.2	1773.7	6387.2	-1126000.0	-8337746.0	-3445.0
374.158	11625.6	-2119.3	-8348.3	1545000.0	-12032330.0	7102.0
374.159	13913.7	-2544.0	-7692.9	2033000.0	-14442180.0	8727.0
374.160	4381.2	1692.6	5999.7	-871821.0	-4375147.0	-6671.0
374.161	6668.6	1196.7	6407.9	-313564.0	-6786177.0	-5048.0
374.162	10291.0	-2649.6	-8842.4	2208000.0	-10490720.0	5501.0
374.163	12579.1	-3074.3	-8187.0	2697000.0	-12900570.0	7125.0
374.164	5668.4	2399.6	5949.1	-1877000.0	-5861777.0	-5100.0
374.165	7956.5	1918.6	6352.8	-1335000.0	-8272630.0	-3477.0
374.166	11559.4	-2093.8	-8258.6	1492000.0	-11959110.0	7069.0
374.167	13847.5	-2518.4	-7603.4	1980000.0	-14368970.0	8694.0
374.168	4440.9	1592.8	6040.3	-706514.0	-4442010.0	-6640.0
374.169	6728.3	1097.0	6448.5	-148256.0	-6852040.0	-5017.0
374.170	10359.0	-2668.3	-8971.2	2257000.0	-10563480.0	5534.0
374.171	12646.6	-3095.6	-8302.4	2747000.0	-12973460.0	7159.0
374.268	5161.4	779.7	1034.8	-808113.0	-5276327.0	-2277.0
374.269	12790.0	-802.1	2365.2	981718.0	-13317100.0	3135.0
374.270	6816.1	275.6	-2320.2	-310375.0	-7017778.0	489.0
374.271	14441.8	-1185.5	-371.0	1367000.0	-15048280.0	5905.0
374.272	3817.5	208.7	1029.9	-6621.0	-3726073.0	-3879.0
374.273	11448.3	-1433.4	2420.0	1821000.0	-11767280.0	1533.0
374.274	5481.6	-268.8	-3075.2	380343.0	-5477140.0	-1112.0
374.275	13108.7	-1698.1	-722.0	2029000.0	-13516290.0	4303.0
374.276	5108.8	1223.9	1583.1	-1090000.0	-5236664.0	-2717.0
374.277	12736.7	-370.4	2918.8	706894.0	-13270610.0	2694.0
374.278	6874.7	-173.4	-2576.4	-27612.0	-7063920.0	933.0
374.279	14500.0	-1643.4	-757.6	1663000.0	-15093530.0	6348.0
374.280	3763.4	645.2	1586.2	-281704.0	-3684790.0	-4319.0
374.281	11392.7	-981.8	2985.6	1533000.0	-11721380.0	1091.0
374.282	5539.4	-732.6	-3379.1	678894.0	-5522485.0	-668.0
374.283	13163.8	-2177.3	-1051.8	2337000.0	-13552320.0	4746.0
374.284	5100.8	899.7	1012.9	-988249.0	-5208692.0	-2308.0
374.285	12729.9	-685.9	2342.2	803808.0	-13252330.0	3104.0
374.286	6754.8	410.8	-1657.4	-499520.0	-6949321.0	457.0
374.287	14379.3	-1105.1	-64.5	1243000.0	-14984130.0	5872.0
374.288	3881.4	162.3	1125.7	86292.0	-3796871.0	-3846.0
374.289	11514.3	-1434.6	2560.6	1857000.0	-11840550.0	1566.0
374.290	5549.1	-261.1	-3212.6	409301.0	-5552026.0	-1078.0
374.291	13176.0	-1704.4	-842.0	2069000.0	-13589230.0	4337.0
374.292	5046.8	1340.7	1570.3	-1269000.0	-5167384.0	-2749.0
374.293	12676.3	-248.4	2895.9	525113.0	-13205920.0	2663.0
374.294	6812.8	-19.3	-1971.4	-230183.0	-6994615.0	901.0
374.295	14437.6	-1585.3	-486.3	1546000.0	-15029350.0	6316.0
374.296	3827.7	604.3	1687.5	-196278.0	-3756487.0	-4287.0
374.297	11459.6	-982.1	3125.4	1567000.0	-11794420.0	1125.0
374.298	5606.0	-738.4	-3528.6	715579.0	-5595599.0	-635.0
374.299	13230.3	-2184.4	-1164.1	2378000.0	-13625460.0	4779.0
488.1	11716.4	496.3	498.2	-654039.0	-11939310.0	-141.0
488.2	20093.8	538.9	586.4	-718187.0	-20635220.0	1047.0
488.3	12142.7	1022.3	929.8	-1332000.0	-12591220.0	-2607.0
488.4	20520.1	1064.3	1017.3	-1395000.0	-21287130.0	-1419.0
488.5	9011.2	381.0	383.7	-502291.0	-9185210.0	-109.0
488.6	17388.7	423.8	471.9	-566550.0	-17871100.0	1079.0
488.7	9437.6	907.0	815.4	-1180000.0	-9837097.0	-2574.0
488.8	17815.0	949.0	902.7	-1244000.0	-18533010.0	-1386.0
488.9	28471.2	581.7	673.9	-782763.0	-29321130.0	2235.0



488.10	12014.8	864.5	800.3	-1129000.0	-12393650.0	-1867.0
488.11	28769.6	949.3	975.2	-1257000.0	-29785470.0	509.0
488.12	25766.1	466.3	559.2	-631021.0	-26567010.0	2267.0
488.13	9309.7	749.2	685.9	-976758.0	-9639526.0	-1835.0
488.14	26064.5	834.0	860.7	-1105000.0	-27031350.0	541.0
488.15	20392.2	906.8	887.9	-1192000.0	-21089560.0	-679.0
488.16	17687.1	791.5	773.4	-1041000.0	-18335440.0	-647.0
488.17	7956.3	477.9	458.7	-626294.0	-8042681.0	-676.0
488.18	16333.8	520.2	547.0	-689895.0	-16728570.0	512.0
488.19	8382.7	1003.8	890.6	-1304000.0	-8694566.0	-3141.0
488.20	16760.1	1045.8	978.4	-1367000.0	-17390480.0	-1954.0
488.21	5251.2	362.6	344.2	-474451.0	-5281558.0	-644.0
488.22	13628.7	405.0	432.5	-538257.0	-13974440.0	544.0
488.23	5677.6	888.5	775.9	-1152000.0	-5938445.0	-3109.0
488.24	14055.0	930.4	863.9	-1216000.0	-14626360.0	-1921.0
488.25	24711.3	563.1	634.9	-754539.0	-25424450.0	1700.0
488.26	8254.8	846.2	760.9	-1101000.0	-8496995.0	-2402.0
488.27	25009.6	930.7	936.3	-1229000.0	-25888820.0	-26.0
488.28	22006.1	447.8	520.3	-602831.0	-22670350.0	1732.0
488.29	5549.7	730.7	646.6	-948888.9	-5740874.0	-2369.0
488.30	22304.5	815.5	821.7	-1077000.0	-23124690.0	6.3
488.31	5449.7	465.4	432.4	-607547.0	-5437229.0	-1032.0
488.32	13827.2	507.7	520.7	-671069.0	-14134110.0	155.0
488.33	5748.2	833.7	734.7	-1082000.0	-5897544.0	-2758.0
488.34	14125.6	875.9	822.8	-1146000.0	-14588460.0	-1570.0
488.35	2744.5	350.2	317.8	-455948.0	-2681132.0	-1000.0
488.36	11122.0	392.5	406.2	-519390.0	-11370020.0	188.0
488.37	3043.0	718.2	620.4	-930030.9	-3140448.0	-2726.0
488.38	11420.5	760.6	708.3	-993798.1	-11834330.0	-1538.0
488.39	16632.3	888.3	848.8	-1164000.0	-17192880.0	-1214.0
488.40	13927.1	772.9	734.4	-1012000.0	-14438780.0	-1182.0
488.41	13220.4	503.6	513.9	-665174.0	-13497970.0	73.0
488.42	21597.8	546.4	602.1	-729504.0	-22193880.0	1261.0
488.43	13646.7	1029.5	945.6	-1343000.0	-14159880.0	-2393.0
488.44	22024.1	1071.7	1032.9	-1407000.0	-22845790.0	-1205.0
488.45	10515.3	388.4	399.4	-513458.0	-10743850.0	105.0
488.46	18892.7	431.2	487.6	-577886.0	-19439760.0	1293.0
488.47	10941.6	914.3	831.1	-1191000.0	-11395760.0	-2360.0
488.48	19319.0	956.4	918.3	-1255000.0	-20091670.0	-1172.0
488.49	29975.2	589.1	689.5	-794098.0	-30889790.0	2449.0
488.50	13518.8	871.9	816.0	-1140000.0	-13962310.0	-1653.0
488.51	30273.6	956.7	990.9	-1268000.0	-31344130.0	723.0
488.52	27270.1	473.7	574.9	-642266.0	-28125670.0	2481.0
488.53	10813.7	756.5	701.5	-987888.9	-11198190.0	-1621.0
488.54	27568.5	841.4	876.3	-1116000.0	-28590010.0	755.0
488.55	21896.2	914.2	903.6	-1204000.0	-22648220.0	-465.0
488.56	19191.1	798.9	789.0	-1052000.0	-19894100.0	-433.0
488.57	14223.0	508.5	524.4	-672606.0	-14533760.0	215.0
488.58	22600.5	551.4	612.6	-737075.0	-23229640.0	1403.0
488.59	14521.5	876.8	826.4	-1147000.0	-14998070.0	-1510.0
488.60	22898.9	919.2	913.9	-1211000.0	-23693980.0	-323.0
488.61	11517.9	393.3	409.9	-520901.0	-11779640.0	248.0
488.62	19895.4	436.3	498.0	-585505.0	-20475520.0	1436.0
488.63	11816.4	761.4	712.0	-995301.0	-12243950.0	-1478.0
488.64	20193.7	803.8	799.4	-1059000.0	-20939890.0	-290.0
488.108	5103.5	987.5	2465.6	-1614000.0	-4944008.0	4248.0
488.109	7434.0	1429.3	2878.9	-2114000.0	-7402110.0	2594.0
488.110	6864.5	2039.9	-2647.8	-2239000.0	-6763506.0	548.0
488.111	9192.8	2428.2	-2103.0	-2700000.0	-9219166.0	-1106.0
488.112	9176.1	-1044.6	1784.8	969311.1	-9673400.0	-1090.0

488.113	11507.5	-587.4	2213.6	458665.0	-12132270.0	-2744.0
488.114	10935.4	69.8	-1349.3	203648.0	-11497330.0	-4790.0
488.115	13264.9	536.0	-929.9	-313374.0	-13946680.0	-6445.0
488.116	5152.8	1396.0	1904.5	-1861000.0	-4979508.0	3805.0
488.117	7485.3	1851.6	2313.1	-2369000.0	-7440103.0	2151.0
488.118	6816.3	1540.4	-2248.1	-1935000.0	-6728728.0	993.0
488.119	9145.1	1936.4	-1706.2	-2401000.0	-9181260.0	-661.0
488.120	9225.3	-632.6	1227.5	718145.0	-9710925.0	-1532.0
488.121	11556.7	-171.1	1653.7	204284.0	-12169800.0	-3186.0
488.122	10881.2	-370.5	-859.5	474670.0	-11451070.0	-4345.0
488.123	13210.6	83.3	-370.0	-33543.0	-13910450.0	-6000.0
488.124	5130.1	1485.1	3060.4	-2220000.0	-4978264.0	4135.0
488.125	7460.6	1924.2	3476.0	-2718000.0	-7436365.0	2481.0
488.126	6891.3	2485.9	-1037.3	-2815000.0	-6797711.0	435.0
488.127	9221.9	2843.2	-503.9	-3257000.0	-9251788.0	-1219.0
488.128	9147.6	-1234.3	1483.7	1252000.0	-9640626.0	-975.0
488.129	11479.4	-756.2	1898.1	726689.0	-12099400.0	-2630.0
488.130	10909.5	-141.1	-1680.9	500069.0	-11463900.0	-4677.0
488.131	13239.3	334.1	-1265.9	-23589.0	-13923180.0	-6332.0
488.132	5182.1	1914.0	2496.3	-2481000.0	-5016079.0	3692.0
488.133	7513.9	2363.7	2909.0	-2985000.0	-7475851.0	2037.0
488.134	6842.5	2035.8	-656.0	-2541000.0	-6763085.0	879.0
488.135	9171.5	2429.1	-134.5	-3005000.0	-9224566.0	-776.0
488.136	9203.7	-901.7	968.9	1050000.0	-9686402.0	-1420.0
488.137	11533.4	-401.7	1372.3	510594.0	-12135710.0	-3073.0
488.138	10856.5	-560.9	-1135.4	756790.0	-11417330.0	-4231.0
488.139	13185.2	-105.1	-718.7	246622.0	-13876890.0	-5886.0
488.140	4471.2	-987.2	6048.1	86931.0	-4473328.0	6686.0
488.141	6802.5	-560.4	6470.6	-393958.0	-6932226.0	5032.0
488.142	10360.8	2650.1	-8879.4	-2204000.0	-10563020.0	-5650.0
488.143	12689.2	3085.3	-8233.5	-2705000.0	-13012650.0	-7305.0
488.144	5698.3	-1672.3	5828.8	938667.0	-5897196.0	5083.0
488.145	8029.6	-1245.8	6251.4	458204.0	-8354095.0	3429.0
488.146	11579.3	2138.8	-8224.6	-1550000.0	-11974070.0	-7251.0
488.147	13907.7	2574.0	-7578.8	-2052000.0	-14433700.0	-8905.0
488.148	4478.3	-831.5	6220.4	-103051.0	-4482527.0	6652.0
488.149	6808.7	-386.2	6632.4	-605768.0	-6940654.0	4999.0
488.150	10371.2	2682.2	-8876.7	-2268000.0	-10570380.0	-5686.0
488.151	12699.1	3119.2	-8221.3	-2771000.0	-13030140.0	-7340.0
488.152	5691.6	-1840.2	5687.0	1137000.0	-5888895.0	5116.0
488.153	8023.5	-1415.2	6106.7	657622.0	-8345642.0	3462.0
488.154	11570.3	2100.2	-8245.7	-1481000.0	-11966350.0	-7216.0
488.155	13898.8	2532.3	-7582.1	-1978000.0	-14425960.0	-8870.0
488.156	4633.5	369.4	4194.6	-730611.0	-4591176.0	5212.0
488.157	6965.6	793.7	4613.0	-1210000.0	-7050872.0	3557.0
488.158	10182.6	1215.8	-7864.1	-1322000.0	-10428200.0	-4167.0
488.159	12510.4	1652.4	-7205.2	-1825000.0	-12877990.0	-5821.0
488.160	5861.3	-318.3	3970.4	122803.0	-6016867.0	3608.0
488.161	8193.4	106.0	4388.9	-356172.0	-8472563.0	1954.0
488.162	11401.3	705.4	-7202.7	-668454.0	-11839200.0	-5767.0
488.163	13729.1	1143.0	-6544.2	-1172000.0	-14298990.0	-7421.0
488.164	4639.5	535.7	4365.0	-931359.0	-4599655.0	5179.0
488.165	6970.7	977.8	4773.3	-1431000.0	-7058579.0	3525.0
488.166	10191.8	1251.2	-7844.7	-1389000.0	-10435870.0	-4202.0
488.167	12520.0	1682.6	-7183.3	-1889000.0	-12895550.0	-5856.0
488.168	5856.5	-491.8	3818.2	324977.0	-6009085.0	3640.0
488.169	8188.5	-67.6	4236.6	-153997.0	-8473806.0	1986.0
488.170	11390.4	676.1	-7189.3	-605898.0	-11831960.0	-5731.0
488.171	13718.8	1111.0	-6540.3	-1107000.0	-14281600.0	-7385.0
488.268	3805.8	-333.0	1674.2	-41618.0	-3727040.0	4309.0

488.269	11575.7	1170.2	3042.7	-1729000.0	-11924980.0	-1203.0
488.270	5575.8	758.3	-3302.0	-703225.0	-5556256.0	608.0
488.271	13336.5	2176.1	-1223.6	-2342000.0	-13738530.0	-4906.0
488.272	5029.5	-979.6	1428.2	772228.0	-5148771.0	2708.0
488.273	12801.2	476.6	2843.9	-866934.9	-13344260.0	-2805.0
488.274	6794.3	218.8	-2778.2	-23185.0	-6972306.0	-992.0
488.275	14556.6	1653.9	-536.9	-1665000.0	-15159170.0	-6506.0
488.276	3853.7	79.2	1120.3	-291512.0	-3761895.0	3867.0
488.277	11626.9	1586.6	2477.7	-1981000.0	-11962000.0	-1646.0
488.278	5521.7	338.0	-2957.1	-449433.0	-5515973.0	1054.0
488.279	13285.7	1721.5	-898.0	-2062000.0	-13701410.0	-4461.0
488.280	5078.9	-575.0	867.7	528546.0	-5184245.0	2265.0
488.281	12850.0	884.2	2290.7	-1116000.0	-13381880.0	-3248.0
488.282	6740.4	-208.4	-2454.6	240073.0	-6931972.0	-547.0
488.283	14502.3	1234.3	-158.3	-1409000.0	-15122940.0	-6061.0
488.284	3813.6	-185.5	1853.6	-222691.0	-3737062.0	4275.0
488.285	11583.7	1319.7	3221.9	-1911000.0	-11932950.0	-1237.0
488.286	5582.2	894.7	-2936.9	-875103.0	-5564633.0	575.0
488.287	13344.2	2259.0	-985.5	-2462000.0	-13756580.0	-4939.0
488.288	5022.5	-1084.6	1311.4	905626.9	-5139546.0	2741.0
488.289	12792.9	425.1	2751.3	-786018.0	-13336360.0	-2772.0
488.290	6786.0	155.1	-2792.0	61930.0	-6962410.0	-958.0
488.291	14548.8	1591.0	-586.3	-1576000.0	-15151150.0	-6472.0
488.292	3862.8	223.2	1292.7	-470091.0	-3773587.0	3833.0
488.293	11634.1	1736.1	2659.1	-2163000.0	-11970170.0	-1680.0
488.294	5529.4	467.1	-2562.9	-617301.0	-5525021.0	1020.0
488.295	13293.5	1813.5	-629.8	-2191000.0	-13719430.0	-4495.0
488.296	5071.7	-672.7	755.1	654658.0	-5175071.0	2298.0
488.297	12842.1	837.7	2196.7	-1038000.0	-13373890.0	-3214.0
488.298	6731.9	-269.5	-2478.1	322231.0	-6921127.0	-512.0
488.299	14495.5	1142.2	-158.4	-1300000.0	-15114670.0	-6027.0
518.1	-915.6	-522.5	117.0	301826.0	865849.6	-6733.0
518.2	-3133.3	-608.3	134.1	346884.0	2510552.0	-14276.0
518.3	-912.3	-962.6	226.3	556338.0	819686.3	-6225.0
518.4	-3129.9	-1048.4	243.3	601643.0	2464414.0	-13768.0
518.5	-703.6	-402.3	90.2	232411.0	665447.2	-5186.0
518.6	-2921.3	-488.0	107.3	277358.0	2310304.0	-12729.0
518.7	-700.3	-842.5	199.4	487055.0	619243.9	-4678.0
518.8	-2917.9	-927.9	216.5	532053.0	2264167.0	-12220.0
518.9	-5350.9	-692.8	151.4	390925.0	4155279.0	-21819.0
518.10	-913.3	-830.5	193.5	479954.0	833432.8	-6377.0
518.11	-5348.6	-1000.4	227.9	569004.0	4122863.0	-21463.0
518.12	-5139.0	-572.2	124.6	321262.0	3955007.0	-20272.0
518.13	-701.3	-710.4	166.7	410659.0	633115.4	-4830.0
518.14	-5136.6	-879.9	201.1	499378.0	3923615.0	-19916.0
518.15	-3130.9	-916.1	210.5	524980.0	2478160.0	-13920.0
518.16	-2919.0	-795.8	183.7	455558.0	2277888.0	-12373.0
518.17	79.6	-483.2	109.6	280915.0	127980.6	-3349.0
518.18	-2138.1	-569.9	126.6	326715.0	1772885.0	-10891.0
518.19	82.9	-923.9	218.8	535832.0	81800.3	-2840.0
518.20	-2134.8	-1010.2	235.7	581525.0	1726722.0	-10383.0
518.21	291.6	-363.1	82.8	211560.0	-72233.8	-1801.0
518.22	-1926.1	-449.6	99.7	257214.0	1572637.0	-9344.0
518.23	294.9	-803.3	192.0	466210.0	-118424.1	-1293.0
518.24	-1922.8	-890.0	208.9	512145.0	1526474.0	-8836.0
518.25	-4355.8	-654.8	143.8	371014.0	3417587.0	-18434.0
518.26	81.9	-791.4	186.0	459147.0	95666.7	-2992.0
518.27	-4353.4	-962.5	220.2	549162.0	3386195.0	-18078.0
518.28	-4143.8	-534.3	117.0	301418.0	3218340.0	-16887.0
518.29	293.9	-671.5	159.2	390018.0	-104550.6	-1445.0

518.30	-4141.5	-842.0	193.4	479556.0	3185923.0	-16531.0
518.31	743.0	-457.3	104.6	267199.0	-363820.4	-1092.0
518.32	-1474.7	-544.2	121.5	313197.0	1281090.0	-8635.0
518.33	745.3	-765.7	181.0	445539.0	-396124.2	-736.0
518.34	-1472.4	-852.2	198.0	491287.0	1248673.0	-8279.0
518.35	955.0	-336.8	77.8	197543.0	-564038.8	455.0
518.36	-1262.7	-423.9	94.7	243732.0	1080842.0	-7088.0
518.37	957.3	-646.0	154.2	376553.0	-596340.5	811.0
518.38	-1260.4	-732.1	171.1	422004.0	1048426.0	-6732.0
518.39	-2135.8	-877.8	203.0	504823.0	1740468.0	-10535.0
518.40	-1923.8	-757.7	176.1	435588.0	1540221.0	-8988.0
518.41	-1313.6	-538.1	120.0	310071.0	1160937.0	-8087.0
518.42	-3531.3	-623.6	137.2	354929.0	2805639.0	-15630.0
518.43	-1310.3	-978.3	229.2	564793.0	1114774.0	-7579.0
518.44	-3528.0	-1063.5	246.3	609586.0	2759476.0	-15121.0
518.45	-1101.7	-417.8	93.2	240631.0	960663.9	-6540.0
518.46	-3319.3	-503.2	110.4	285353.0	2605392.0	-14083.0
518.47	-1098.3	-858.0	202.4	495268.0	914526.1	-6032.0
518.48	-3316.0	-943.1	219.5	540010.0	2559228.0	-13574.0
518.49	-5749.0	-708.0	154.5	398857.0	4450341.0	-23173.0
518.50	-1311.3	-846.1	196.5	488204.0	1128520.0	-7731.0
518.51	-5746.6	-1015.6	230.9	576960.0	4417950.0	-22817.0
518.52	-5537.0	-587.5	127.7	329290.0	4250094.0	-21626.0
518.53	-1099.3	-726.0	169.6	418906.0	928272.4	-6184.0
518.54	-5534.7	-895.1	204.1	507343.0	4218677.0	-21270.0
518.55	-3529.0	-931.3	213.6	532967.0	2773222.0	-15274.0
518.56	-3317.0	-811.0	186.8	463525.0	2572975.0	-13727.0
518.57	-1579.0	-548.4	122.0	315539.0	1357645.0	-8990.0
518.58	-3796.7	-633.8	139.2	360244.0	3002347.0	-16533.0
518.59	-1576.7	-856.3	198.5	493636.0	1325228.0	-8634.0
518.60	-3794.3	-941.4	215.6	538275.0	2969955.0	-16177.0
518.61	-1367.0	-428.1	95.2	246094.0	1157397.0	-7443.0
518.62	-3584.7	-513.2	112.4	290557.0	2802099.0	-14985.0
518.63	-1364.7	-736.3	171.6	424390.0	1124980.0	-7087.0
518.64	-3582.4	-821.1	188.8	468841.0	2769683.0	-14630.0
518.108	1271.2	-2825.3	1837.1	1118000.0	-716687.3	-2476.0
518.109	770.3	-3088.2	2356.1	1235000.0	-291905.4	-4580.0
518.110	-332.8	1683.1	-1113.4	-826713.9	438359.6	1763.0
518.111	-832.2	1355.3	-596.1	-665947.0	861995.7	-345.0
518.112	-575.1	-2226.0	1067.8	1135000.0	433413.4	-9610.0
518.113	-1076.5	-2492.6	1586.0	1252000.0	859053.4	-11712.0
518.114	-2178.1	1820.9	-2036.4	-683232.0	1587743.0	-5369.0
518.115	-2678.3	1562.3	-1524.3	-567539.0	2012917.0	-7475.0
518.116	1149.1	-1558.4	1031.4	548023.0	-630459.7	-2205.0
518.117	647.0	-1757.7	1549.3	634699.0	-204272.2	-4306.0
518.118	-211.6	247.0	-377.9	-163141.0	352333.8	1493.0
518.119	-711.2	-63.3	146.9	-13511.0	776599.3	-614.0
518.120	-697.0	-956.2	261.8	561579.0	520011.6	-9339.0
518.121	-1198.4	-1217.3	779.4	675340.0	946145.7	-11441.0
518.122	-2053.2	508.8	-1235.6	-80042.0	1499411.0	-5650.0
518.123	-2553.3	237.7	-721.1	43737.0	1923611.0	-7756.0
518.124	1260.9	-3477.2	2922.6	975932.0	-704298.8	-2504.0
518.125	760.0	-3737.7	3440.3	1093000.0	-278890.0	-4607.0
518.126	-343.2	806.3	-63.9	-845388.0	451554.6	1738.0
518.127	-844.1	432.8	432.5	-660336.0	876978.4	-367.0
518.128	-564.4	-1479.7	81.3	1103000.0	419927.4	-9584.0
518.129	-1065.9	-1720.3	596.3	1204000.0	845741.0	-11686.0
518.130	-2168.8	2641.9	-3052.5	-759114.0	1576101.0	-5340.0
518.131	-2669.1	2392.6	-2541.8	-649485.0	2000250.0	-7445.0
518.132	1137.2	-2126.8	2116.7	365825.0	-616113.9	-2228.0

518.133	635.5	-2343.3	2636.1	462404.0	-190316.0	-4330.0
518.134	-221.5	-531.9	714.4	-239355.0	365039.7	1466.0
518.135	-721.2	-840.7	1239.0	-90389.0	789432.7	-641.0
518.136	-690.5	-346.5	-785.7	600793.0	509819.7	-9302.0
518.137	-1190.9	-551.9	-254.9	683825.0	935047.3	-11407.0
518.138	-2044.8	1340.5	-2245.1	-163725.0	1487541.0	-5618.0
518.139	-2544.4	1080.9	-1740.9	-46396.0	1911867.0	-7725.0
518.140	2499.7	-7433.4	5046.5	3221000.0	-1665201.0	-9932.0
518.141	1998.4	-7724.9	5561.3	3362000.0	-1239306.0	-12034.0
518.142	-2858.5	6733.5	-4929.8	-2983000.0	2195227.0	4240.0
518.143	-3358.1	6458.5	-4409.1	-2860000.0	2619554.0	2133.0
518.144	1943.0	-7339.2	4826.3	3296000.0	-1317352.0	-12063.0
518.145	1441.7	-7631.3	5341.0	3437000.0	-892456.9	-14166.0
518.146	-3410.8	6825.9	-5194.7	-2992000.0	2539192.0	2096.0
518.147	-3910.3	6550.8	-4674.1	-2870000.0	2963543.0	-12.0
518.148	2497.2	-7610.3	5367.3	3166000.0	-1661835.0	-9941.0
518.149	1996.3	-7868.5	5884.4	3279000.0	-1236838.0	-12045.0
518.150	-2862.7	6453.6	-4624.9	-2938000.0	2200163.0	4236.0
518.151	-3362.0	6178.1	-4103.8	-2816000.0	2624565.0	2127.0
518.152	1945.4	-7191.3	4509.9	3366000.0	-1320744.0	-12053.0
518.153	1443.7	-7482.4	5024.1	3507000.0	-894949.9	-14154.0
518.154	-3407.3	7103.7	-5500.9	-3034000.0	2535079.0	2103.0
518.155	-3906.9	6821.4	-4980.6	-2906000.0	2959406.0	-4.8
518.156	2094.2	-3223.3	2357.7	1330000.0	-1377016.0	-9031.0
518.157	1592.4	-3513.9	2871.8	1470000.0	-951247.0	-11132.0
518.158	-2443.5	2399.3	-2277.7	-996159.0	1900451.0	3310.0
518.159	-2942.7	2121.9	-1757.3	-872907.0	2323879.0	1201.0
518.160	1537.0	-3125.7	2137.7	1403000.0	-1029294.0	-11162.0
518.161	1035.3	-3416.3	2651.8	1543000.0	-603596.7	-13263.0
518.162	-2995.9	2492.2	-2542.9	-1005000.0	2244390.0	1166.0
518.163	-3495.1	2216.4	-2021.7	-883026.9	2667818.0	-942.0
518.164	2092.2	-3388.0	2678.9	1265000.0	-1374523.0	-9042.0
518.165	1590.9	-3646.3	3195.3	1379000.0	-948627.4	-11145.0
518.166	-2446.9	2118.0	-1971.7	-952249.0	1904589.0	3303.0
518.167	-2946.4	1831.6	-1455.2	-824194.1	2328940.0	1195.0
518.168	1538.4	-2972.8	1820.6	1471000.0	-1031939.0	-11148.0
518.169	1036.7	-3263.4	2334.7	1611000.0	-606171.7	-13249.0
518.170	-2991.4	2771.6	-2847.4	-1049000.0	2239531.0	1170.0
518.171	-3491.0	2495.5	-2326.7	-926244.1	2662857.0	-938.0
518.268	1212.1	-2299.5	900.1	1012000.0	-812672.1	-2526.0
518.269	-458.5	-3167.3	2647.3	1393000.0	605545.3	-9536.0
518.270	-397.3	2032.6	-2067.2	-869000.0	347090.6	1730.0
518.271	-2062.0	1083.4	-340.6	-432839.0	1761180.0	-5297.0
518.272	657.2	-2143.8	681.0	1042000.0	-466612.0	-4664.0
518.273	-1014.3	-3085.5	2403.5	1480000.0	951824.3	-11670.0
518.274	-949.4	2116.5	-2336.6	-866308.0	690895.6	-414.0
518.275	-2615.1	1144.8	-607.4	-412484.0	2104942.0	-7438.0
518.276	1090.8	-1033.8	94.4	441637.0	-726427.6	-2257.0
518.277	-581.8	-1848.7	1839.6	799355.0	693144.6	-9261.0
518.278	-272.4	735.3	-1269.9	-278734.0	258175.0	1450.0
518.279	-1939.0	-256.3	440.6	181332.0	1673367.0	-5572.0
518.280	535.1	-878.3	-125.8	473717.0	-379931.4	-4392.0
518.281	-1136.1	-1818.7	1590.1	908701.0	1038942.0	-11399.0
518.282	-824.7	815.3	-1540.8	-269173.0	602077.3	-694.0
518.283	-2490.1	-134.3	201.7	170275.0	2016635.0	-7719.0
518.284	1209.1	-2492.9	1221.8	967697.0	-808432.7	-2535.0
518.285	-461.6	-3363.2	2972.4	1350000.0	609482.3	-9544.0
518.286	-399.4	1808.5	-1742.5	-893001.0	350259.1	1720.0
518.287	-2064.8	808.6	-24.9	-413274.0	1764470.0	-5305.0
518.288	659.6	-1948.4	376.1	1064000.0	-470042.4	-4653.0



518.289	-1011.3	-2854.9	2106.5	1467000.0	948584.9	-11662.0
518.290	-946.3	2371.2	-2639.1	-896719.1	686941.6	-406.0
518.291	-2612.2	1389.8	-912.5	-434052.0	2101677.0	-7430.0
518.292	1087.1	-1225.4	415.8	397150.0	-722137.8	-2263.0
518.293	-584.3	-2057.9	2165.6	763217.0	696649.8	-9271.0
518.294	-275.3	493.9	-959.4	-294115.0	262016.7	1442.0
518.295	-1941.9	-523.3	764.0	191622.0	1676631.0	-5580.0
518.296	537.6	-678.9	-429.4	491345.0	-383434.5	-4382.0
518.297	-1133.2	-1582.5	1296.1	891668.0	1034677.0	-11391.0
518.298	-821.5	1074.9	-1842.9	-303364.0	598102.7	-686.0
518.299	-2488.0	59.2	-122.0	179186.0	2013168.0	-7708.0
580.1	4032.9	-499.0	406.7	30977.0	-1256458.0	40999.0
580.2	5936.8	-569.8	481.6	28162.0	-1879724.0	87100.0
580.3	4299.8	-882.7	777.0	26953.0	-1343786.0	29673.0
580.4	6203.8	-954.0	851.3	24686.0	-1968027.0	75775.0
580.5	3101.6	-384.8	313.3	24150.0	-965589.4	31541.0
580.6	5005.5	-455.3	388.3	21189.0	-1589856.0	77643.0
580.7	3368.6	-768.8	683.6	20260.0	-1053892.0	20216.0
580.8	5272.5	-839.4	758.0	17661.0	-1677158.0	66317.0
580.9	7840.7	-638.5	557.0	24200.0	-2503991.0	133201.0
580.10	4219.7	-767.5	665.9	28155.0	-1317095.0	33071.0
580.11	8027.6	-906.9	815.8	21545.0	-2565602.0	125274.0
580.12	6909.5	-523.7	463.7	17095.0	-2214096.0	123744.0
580.13	3288.5	-653.6	572.5	21438.0	-1027201.0	23614.0
580.14	7096.4	-792.2	722.5	14448.0	-2275708.0	115816.0
580.15	6123.7	-838.2	740.4	25472.0	-1941336.0	79172.0
580.16	5192.4	-724.0	647.1	18632.0	-1651467.0	69715.0
580.17	3195.0	-465.5	373.9	31068.0	-981907.7	20314.0
580.18	5099.0	-537.8	448.4	29157.0	-1606149.0	66415.0
580.19	3462.0	-850.0	744.2	27439.0	-1069210.0	8989.0
580.20	5365.9	-922.1	818.3	25595.0	-1693476.0	55090.0
580.21	2263.8	-351.4	280.5	24314.0	-692013.5	10856.0
580.22	4167.7	-423.4	355.0	22209.0	-1316280.0	56958.0
580.23	2530.8	-735.4	650.9	20384.0	-779315.7	-469.0
580.24	4434.7	-808.0	724.9	18806.0	-1403582.0	45633.0
580.25	7002.9	-607.0	523.7	25437.0	-2230415.0	112517.0
580.26	3381.9	-734.2	633.1	28320.0	-1043519.0	12386.0
580.27	7189.8	-875.5	782.5	22850.0	-2291026.0	104589.0
580.28	6071.6	-492.4	430.4	18413.0	-1939546.0	103059.0
580.29	2450.7	-620.6	539.6	21794.0	-753625.0	2929.0
580.30	6258.5	-760.9	689.2	15803.0	-2001157.0	95132.0
580.31	2636.5	-443.6	352.0	31373.0	-799515.4	6524.0
580.32	4540.4	-516.3	426.2	29738.0	-1422782.0	52625.0
580.33	2823.4	-712.6	611.2	28735.0	-860126.9	-1404.0
580.34	4727.3	-784.7	685.4	26869.0	-1484393.0	44698.0
580.35	1705.2	-328.9	258.7	24268.0	-509154.5	-2933.0
580.36	3609.1	-402.0	332.9	22838.0	-1132913.0	43168.0
580.37	1892.1	-599.3	517.7	22366.0	-570258.0	-10861.0
580.38	3796.0	-670.8	591.9	20189.0	-1194524.0	35240.0
580.39	5285.8	-806.3	707.3	26401.0	-1666785.0	58487.0
580.40	4354.6	-692.4	613.9	19781.0	-1376891.0	49030.0
580.41	4368.0	-512.2	419.8	30819.0	-1365494.0	49273.0
580.42	6271.9	-582.5	494.9	27740.0	-1989760.0	95374.0
580.43	4635.0	-896.3	790.0	27054.0	-1452796.0	37947.0
580.44	6538.9	-966.5	864.6	24180.0	-2077062.0	84049.0
580.45	3436.7	-397.9	326.5	23961.0	-1075625.0	39815.0
580.46	5340.7	-468.0	401.6	20712.0	-1699865.0	85917.0
580.47	3703.7	-781.9	696.7	20085.0	-1162927.0	28490.0
580.48	5607.7	-852.0	771.3	17158.0	-1787168.0	74591.0
580.49	8175.9	-651.0	570.4	23650.0	-2614001.0	141475.0

580.50	4554.9	-780.7	679.0	28011.0	-1427105.0	41345.0
580.51	8362.7	-919.4	829.1	21031.0	-2674637.0	133548.0
580.52	7244.6	-536.5	477.1	16655.0	-2324132.0	132018.0
580.53	3623.6	-666.8	585.5	21306.0	-1137236.0	31888.0
580.54	7431.5	-804.8	735.9	13941.0	-2384743.0	124090.0
580.55	6458.8	-850.9	753.8	25002.0	-2051371.0	87446.0
580.56	5527.6	-736.6	660.4	18141.0	-1760477.0	77989.0
580.57	4591.4	-520.9	428.6	30687.0	-1438851.0	54789.0
580.58	6495.4	-590.9	503.8	27406.0	-2063091.0	100890.0
580.59	4778.3	-789.4	687.8	27838.0	-1500462.0	46861.0
580.60	6682.2	-859.3	762.6	24677.0	-2123728.0	92962.0
580.61	3660.2	-406.6	335.2	23818.0	-1148956.0	45331.0
580.62	5564.1	-476.2	410.5	20265.0	-1773223.0	91433.0
580.63	3847.1	-675.5	594.3	21201.0	-1210568.0	37404.0
580.64	5751.0	-745.0	669.3	17816.0	-1833834.0	83505.0
580.108	-310.2	-961.7	1693.3	-28693.0	154936.8	12936.0
580.109	358.9	-858.6	1961.3	17886.0	-74552.9	23940.0
580.110	1656.4	1852.7	1675.2	-2098000.0	-489914.8	-1970.0
580.111	2325.1	1885.8	1962.1	-2023000.0	-719470.9	9028.0
580.112	4093.2	-2803.6	-640.6	1840000.0	-1283169.0	44979.0
580.113	4762.4	-2701.4	-365.8	1886000.0	-1512494.0	55984.0
580.114	6060.2	-93.3	-729.9	-261835.0	-1928436.0	30053.0
580.115	6729.0	30.3	-463.9	-218063.0	-2157862.0	41053.0
580.116	-118.2	111.6	1521.4	-662589.0	91600.4	11748.0
580.117	551.1	351.0	1843.3	-666498.0	-137963.6	22757.0
580.118	1464.7	740.9	1795.2	-1425000.0	-426662.3	-771.0
580.119	2133.4	777.1	2086.5	-1354000.0	-656076.4	10227.0
580.120	4285.2	-1723.1	-807.3	1202000.0	-1346488.0	43791.0
580.121	4954.3	-1612.4	-533.9	1245000.0	-1575837.0	54796.0
580.122	5867.6	-1234.7	-584.9	407437.0	-1865270.0	31243.0
580.123	6536.4	-1129.2	-312.4	456383.0	-2094696.0	42243.0
580.124	-295.0	397.6	3571.0	-1270000.0	149972.7	12991.0
580.125	374.0	516.7	3848.0	-1229000.0	-79531.3	23996.0
580.126	1671.6	3011.0	3537.1	-3261000.0	-494861.8	-1914.0
580.127	2340.5	3045.9	3816.1	-3180000.0	-724566.2	9089.0
580.128	4079.1	-3895.5	-2162.1	2774000.0	-1278744.0	44918.0
580.129	4748.2	-3760.6	-1899.4	2810000.0	-1508094.0	55922.0
580.130	6046.1	-946.9	-2207.6	590192.0	-1924011.0	29996.0
580.131	6715.0	-809.8	-1945.6	629673.0	-2153412.0	40996.0
580.132	-102.8	1653.1	3474.5	-1973000.0	86581.1	11812.0
580.133	566.4	1855.5	3788.7	-1963000.0	-142959.3	22818.0
580.134	1479.7	1907.4	3677.2	-2607000.0	-431578.1	-722.0
580.135	2148.5	1946.3	3968.4	-2537000.0	-661247.8	10276.0
580.136	4271.8	-2803.4	-2342.7	2145000.0	-1341885.0	43743.0
580.137	4940.6	-2669.9	-2076.1	2178000.0	-1571311.0	54745.0
580.138	5853.8	-2110.9	-2081.1	1266000.0	-1859769.0	31189.0
580.139	6522.5	-1952.2	-1802.2	1300000.0	-2089220.0	42187.0
580.140	-1064.3	-4222.2	1132.8	2829000.0	404220.8	41508.0
580.141	-395.3	-4166.7	1390.9	2903000.0	174687.7	52513.0
580.142	5493.8	4234.4	742.2	-3840000.0	-1746047.0	-8176.0
580.143	6162.5	4340.3	1034.3	-3800000.0	-1975498.0	2823.0
580.144	257.0	-5016.4	359.1	3504000.0	-27339.7	51127.0
580.145	926.0	-4962.0	617.0	3579000.0	-256871.7	62132.0
580.146	6814.8	3766.7	82.3	-3369000.0	-2178108.0	1431.0
580.147	7483.5	3872.5	374.3	-3329000.0	-2407559.0	12430.0
580.148	-1059.9	-3764.3	1703.5	2437000.0	402756.3	41524.0
580.149	-390.9	-3653.9	1970.2	2483000.0	173248.3	52529.0
580.150	5498.2	4443.5	1189.4	-4077000.0	-1747932.0	-8159.0
580.151	6166.9	4549.6	1483.3	-4038000.0	-1977382.0	2840.0
580.152	252.6	-5507.8	-190.6	3901000.0	-25908.3	51109.0

580.153	921.6	-5452.7	65.2	3977000.0	-255462.3	62115.0
580.154	6810.4	3551.5	-370.5	-3127000.0	-2176223.0	1415.0
580.155	7479.2	3645.4	-80.1	-3081000.0	-2405649.0	12414.0
580.156	-424.6	-658.6	568.8	724907.0	193129.7	37547.0
580.157	244.5	-603.4	823.7	800730.0	-36408.0	48552.0
580.158	4852.5	478.7	1174.9	-1610000.0	-1534649.0	-4219.0
580.159	5521.2	584.8	1469.2	-1572000.0	-1764100.0	6780.0
580.160	896.8	-1452.3	-207.1	1401000.0	-238425.3	47165.0
580.161	1565.9	-1397.0	47.8	1476000.0	-467963.0	58170.0
580.162	6173.5	9.5	512.2	-1138000.0	-1966709.0	5389.0
580.163	6842.2	115.7	806.8	-1099000.0	-2195160.0	16388.0
580.164	-420.2	-177.3	1143.5	320801.0	191698.3	37563.0
580.165	248.9	-69.1	1406.7	368608.0	-37817.4	48568.0
580.166	4856.8	689.3	1628.4	-1850000.0	-1536558.0	-4204.0
580.167	5525.5	795.4	1921.3	-1811000.0	-1766010.0	6796.0
580.168	892.5	-1942.1	-763.4	1799000.0	-237033.6	47148.0
580.169	1561.6	-1886.8	-508.4	1875000.0	-466570.3	58153.0
580.170	6169.1	-200.0	66.4	-901251.9	-1964825.0	5373.0
580.171	6837.8	-95.7	358.5	-860923.1	-2194276.0	16372.0
580.268	449.8	-1562.5	537.0	567736.0	-80453.2	11306.0
580.269	2680.0	-1302.7	1395.6	751090.0	-845486.1	47991.0
580.270	2417.4	935.6	366.3	-1394000.0	-726068.2	-3592.0
580.271	4646.4	1240.4	1315.7	-1228000.0	-1489905.0	33071.0
580.272	1770.9	-2263.3	-234.8	1200000.0	-511929.3	20923.0
580.273	4001.2	-2025.1	649.7	1412000.0	-1277496.0	57605.0
580.274	3738.4	440.7	-317.1	-899595.0	-1157129.0	6015.0
580.275	5967.6	698.1	633.1	-713015.0	-1921915.0	42678.0
580.276	641.7	-488.6	370.5	-67271.0	-143754.0	10117.0
580.277	2872.2	-114.3	1270.5	75829.0	-908753.7	46806.0
580.278	2225.0	-177.1	507.9	-736303.0	-661851.3	-2405.0
580.279	4454.4	113.5	1448.2	-558879.0	-1426587.0	34262.0
580.280	1962.9	-1193.6	-406.5	569586.0	-575306.8	19734.0
580.281	4193.1	-914.5	491.3	763487.0	-1340840.0	56415.0
580.282	3546.0	-688.1	-187.3	-229673.0	-1093912.0	7203.0
580.283	5775.1	-426.9	777.6	-53030.0	-1858724.0	43865.0
580.284	454.3	-1134.5	1105.8	188973.0	-81918.2	11322.0
580.285	2684.5	-891.5	1960.1	377201.0	-847345.0	48008.0
580.286	2421.8	1291.2	914.5	-1743000.0	-726952.6	-3577.0
580.287	4650.8	1511.8	1833.1	-1524000.0	-1491790.0	33087.0
580.288	1766.6	-2656.5	-732.9	1529000.0	-510537.6	20905.0
580.289	3996.9	-2341.5	192.5	1688000.0	-1275586.0	57586.0
580.290	3734.2	199.4	-753.8	-654062.0	-1156194.0	5998.0
580.291	5963.4	439.6	188.7	-455888.0	-1920980.0	42661.0
580.292	646.3	-64.2	933.0	-442977.0	-145253.6	10135.0
580.293	2876.6	264.9	1823.2	-286189.0	-910638.1	46821.0
580.294	2229.5	192.0	1045.0	-1085000.0	-663710.3	-2387.0
580.295	4458.8	392.2	1983.8	-868234.0	-1428471.0	34277.0
580.296	1958.6	-1577.3	-898.5	891246.0	-573397.0	19717.0
580.297	4188.9	-1233.2	33.9	1040000.0	-1338904.0	56399.0
580.298	3541.7	-921.1	-622.4	11612.0	-1092002.0	7186.0
580.299	5771.0	-700.3	325.8	216901.0	-1856763.0	43852.0
593.1	-846.8	521.8	111.8	-297831.0	815293.9	6605.0
593.2	-3022.3	600.9	128.2	-336072.0	2428696.0	14039.0
593.3	-819.4	971.4	215.9	-559015.0	750104.1	6124.0
593.4	-2994.9	1049.4	232.3	-596268.0	2364643.0	13557.0
593.5	-650.7	401.7	86.1	-229301.0	626526.0	5088.0
593.6	-2826.3	481.0	102.5	-267712.0	2240392.0	12521.0
593.7	-623.4	851.2	190.2	-490384.0	561637.9	4606.0
593.8	-2798.9	929.5	206.7	-527935.0	2175339.0	12039.0
593.9	-5197.8	681.1	144.5	-375183.0	4043098.0	21472.0

593.10	-827.6	836.6	184.6	-480668.0	769555.0	6268.0
593.11	-5178.7	995.1	217.4	-557389.0	3997941.0	21135.0
593.12	-5001.8	561.2	118.8	-306852.0	3854794.0	19955.0
593.13	-631.6	716.3	159.0	-412047.0	581089.8	4751.0
593.14	-4982.7	875.1	191.7	-489013.0	3809636.0	19617.0
593.15	-3003.1	915.0	201.1	-518309.0	2383564.0	13702.0
593.16	-2807.1	795.0	175.4	-449892.0	2195260.0	12184.0
593.17	129.5	487.0	104.5	-281226.0	91136.7	3270.0
593.18	-2046.0	565.1	121.0	-318571.0	1705237.0	10703.0
593.19	156.9	936.4	208.6	-542246.0	26250.0	2788.0
593.20	-2018.6	1014.0	225.1	-579120.0	1640184.0	10222.0
593.21	325.5	366.7	78.9	-212610.0	-97334.5	1752.0
593.22	-1849.9	445.1	95.3	-250204.0	1516958.0	9186.0
593.23	352.9	816.3	183.0	-473769.0	-162211.2	1271.0
593.24	-1822.6	893.7	199.5	-510506.0	1451880.0	8704.0
593.25	-4221.5	645.1	137.3	-357596.0	3319639.0	18137.0
593.26	148.7	801.8	177.4	-464125.0	45705.9	2933.0
593.27	-4202.4	959.1	210.2	-539779.0	3273482.0	17799.0
593.28	-4025.5	525.2	111.6	-289256.0	3131335.0	16619.0
593.29	344.7	681.5	151.8	-395409.0	-142762.3	1415.0
593.30	-4006.4	839.2	184.5	-471431.0	3085177.0	16282.0
593.31	780.4	463.5	99.7	-269940.0	-391415.6	1046.0
593.32	-1395.1	541.3	116.1	-306994.0	1222272.0	8480.0
593.33	799.6	778.5	172.6	-452933.0	-436857.4	709.0
593.34	-1375.9	856.0	189.0	-489821.0	1177141.0	8142.0
593.35	976.4	343.4	74.0	-201515.0	-579883.8	-471.0
593.36	-1199.1	421.2	90.5	-238555.0	1033968.0	6962.0
593.37	995.6	658.1	147.0	-384130.0	-625326.7	-808.0
593.38	-1179.9	735.8	163.4	-421206.0	988836.3	6625.0
593.39	-2026.8	879.4	193.8	-501078.0	1660105.0	10366.0
593.40	-1830.8	759.1	168.2	-432398.0	1471801.0	8849.0
593.41	-1237.3	535.8	114.7	-304536.0	1104283.0	7940.0
593.42	-3412.8	615.3	131.0	-343079.0	2718685.0	15373.0
593.43	-1209.9	985.2	218.8	-565538.0	1039230.0	7458.0
593.44	-3385.5	1063.8	235.2	-603310.0	2653607.0	14891.0
593.45	-1041.3	415.7	89.0	-236032.0	915978.4	6422.0
593.46	-3216.8	495.4	105.4	-274738.0	2530381.0	13856.0
593.47	-1013.9	865.1	193.1	-497049.0	850925.7	5940.0
593.48	-3189.5	943.9	209.6	-534965.0	2465302.0	13374.0
593.49	-5588.3	695.4	147.4	-382212.0	4333087.0	22806.0
593.50	-1218.1	850.5	187.6	-487339.0	1059151.0	7602.0
593.51	-5569.2	1009.5	220.3	-564408.0	4286930.0	22469.0
593.52	-5392.3	575.5	121.7	-313853.0	4144783.0	21289.0
593.53	-1022.1	730.3	161.9	-418747.0	870846.6	6085.0
593.54	-5373.2	889.5	194.6	-496033.0	4098625.0	20951.0
593.55	-3393.7	929.3	203.9	-525327.0	2673527.0	15036.0
593.56	-3197.7	809.4	178.3	-456915.0	2485223.0	13518.0
593.57	-1497.6	545.1	116.6	-309022.0	1297284.0	8829.0
593.58	-3673.1	624.9	133.0	-347771.0	2911686.0	16262.0
593.59	-1478.5	859.9	189.5	-491840.0	1252126.0	8492.0
593.60	-3654.0	938.9	205.9	-530023.0	2866528.0	15925.0
593.61	-1301.6	425.0	90.9	-240534.0	1108979.0	7312.0
593.62	-3477.1	505.0	107.3	-279484.0	2723381.0	14745.0
593.63	-1282.5	739.6	163.8	-423197.0	1063822.0	6974.0
593.64	-3458.0	819.0	180.2	-461596.0	2678224.0	14408.0
593.108	-706.3	1713.4	89.1	-1164000.0	557034.6	9311.0
593.109	-1184.5	1925.5	606.8	-1249000.0	961670.0	11495.0
593.110	-2037.2	-223.5	-1302.7	-143362.0	1517468.0	5529.0
593.111	-2514.8	-26.3	-793.5	-222392.0	1922373.0	7715.0
593.112	1227.3	1951.4	996.5	-968888.0	-714818.1	2044.0

593.113	748.0	2161.6	1517.6	-1067000.0	-309351.6	4225.0
593.114	-112.5	61.3	-340.1	-121089.0	252781.6	-1761.0
593.115	-589.6	372.8	185.2	-276150.0	656805.9	427.0
593.116	-583.7	2973.5	890.7	-1729000.0	469887.9	9588.0
593.117	-1061.8	3187.0	1408.3	-1815000.0	874780.6	11772.0
593.118	-2162.8	-1495.5	-2097.1	429678.0	1607622.0	5242.0
593.119	-2640.4	-1298.7	-1588.0	351060.0	2011527.0	7428.0
593.120	1349.9	3220.5	1797.3	-1540000.0	-801732.9	2321.0
593.121	871.7	3500.2	2320.2	-1672000.0	-397359.5	4505.0
593.122	-234.1	-1367.9	-1079.0	541272.0	339114.9	-2036.0
593.123	-711.1	-1045.5	-562.9	379214.0	743063.6	151.0
593.124	-631.2	1628.2	-1134.9	-2430000.0	462156.3	9199.0
593.125	-1108.8	1841.4	-618.3	-2517000.0	866863.8	11385.0
593.126	-1959.6	-487.2	-2512.2	-1317000.0	1421143.0	5424.0
593.127	-2437.3	-290.8	-2003.4	-1395000.0	1826023.0	7610.0
593.128	1135.6	2901.4	2162.8	-379517.0	-607217.6	2106.0
593.129	658.1	3212.0	2690.2	-533868.0	-202932.8	4293.0
593.130	-202.4	1211.4	827.4	369597.0	359310.5	-1696.0
593.131	-679.5	1528.0	1353.5	211256.0	763255.8	492.0
593.132	-505.6	2815.1	-298.8	-2958000.0	372671.2	9484.0
593.133	-983.7	3025.3	219.0	-3042000.0	777582.9	11668.0
593.134	-2085.0	-1760.8	-3306.6	-742091.0	1510348.0	5138.0
593.135	-2562.7	-1565.1	-2797.4	-819615.1	1915228.0	7324.0
593.136	1260.0	4266.9	2960.8	-997359.0	-695527.0	2387.0
593.137	782.3	4577.1	3487.8	-1150000.0	-291322.8	4573.0
593.138	-325.1	-70.3	27.5	945538.9	446510.9	-1974.0
593.139	-802.3	239.2	552.1	791899.0	850576.9	214.0
593.140	1528.1	4039.4	1920.8	-2217000.0	-1013550.0	11194.0
593.141	1050.2	4239.6	2442.4	-2290000.0	-608516.8	13379.0
593.142	-2923.0	-2454.1	-2485.6	1022000.0	2201874.0	-1453.0
593.143	-3400.2	-2153.4	-1969.8	869121.0	2605879.0	734.0
593.144	2111.4	3997.1	2186.1	-2068000.0	-1397655.0	9022.0
593.145	1633.6	4196.8	2707.7	-2140000.0	-992800.7	11208.0
593.146	-2346.3	-2271.7	-2188.8	938795.0	1822096.0	-3642.0
593.147	-2823.6	-1968.1	-1674.3	784456.0	2227076.0	-1456.0
593.148	1551.3	3991.6	1562.5	-2587000.0	-1041668.0	11162.0
593.149	1073.1	4207.2	2080.5	-2675000.0	-637222.5	13346.0
593.150	-2895.9	-2774.1	-2833.9	861979.0	2169745.0	-1472.0
593.151	-3373.4	-2473.9	-2318.5	709263.0	2573675.0	714.0
593.152	2087.6	4073.9	2545.9	-1719000.0	-1367689.0	9052.0
593.153	1610.1	4275.4	3067.8	-1792000.0	-963759.2	11238.0
593.154	-2372.7	-1949.5	-1839.7	1099000.0	1854402.0	-3621.0
593.155	-2850.2	-1637.3	-1329.2	940883.0	2258332.0	-1435.0
593.156	1935.6	8222.6	4594.6	-4087000.0	-1302229.0	12115.0
593.157	1458.3	8424.8	5116.6	-4160000.0	-898248.1	14301.0
593.158	-3338.7	-6785.3	-5120.0	3003000.0	2497473.0	-2398.0
593.159	-3816.3	-6485.3	-4604.7	2850000.0	2901377.0	-212.0
593.160	2519.4	8174.9	4861.6	-3933000.0	-1687206.0	9945.0
593.161	2042.0	8377.0	5383.7	-4006000.0	-1283251.0	12132.0
593.162	-2761.9	-6602.9	-4823.0	2919000.0	2118720.0	-4588.0
593.163	-3239.5	-6303.0	-4307.7	2766000.0	2522625.0	-2402.0
593.164	1958.4	8183.3	4233.1	-4466000.0	-1331448.0	12081.0
593.165	1480.6	8400.3	4751.8	-4554000.0	-926593.9	14267.0
593.166	-3312.2	-7106.5	-5469.3	2844000.0	2466192.0	-2419.0
593.167	-3789.8	-6806.3	-4954.1	2691000.0	2870096.0	-233.0
593.168	2496.6	8251.1	5223.7	-3582000.0	-1658987.0	9978.0
593.169	2019.3	8453.3	5745.7	-3655000.0	-1254007.0	12165.0
593.170	-2789.4	-6283.6	-4475.2	3079000.0	2150748.0	-4570.0
593.171	-3266.7	-5983.2	-3959.3	2926000.0	2554728.0	-2383.0
593.268	531.5	1328.9	-213.4	-831208.0	-363025.2	4229.0



593.269	-1061.9	2058.6	1505.0	-1129000.0	985755.3	11511.0
593.270	-801.9	-786.9	-1535.0	278038.0	599821.3	441.0
593.271	-2393.0	116.0	192.0	-157709.0	1947255.0	7730.0
593.272	1113.7	1275.5	45.4	-679960.0	-746621.3	2054.0
593.273	-481.2	2002.2	1801.4	-978795.0	603939.8	9334.0
593.274	-225.1	-671.1	-1238.5	246710.0	220820.9	-1749.0
593.275	-1817.2	352.9	472.6	-260043.0	1569249.0	5538.0
593.276	653.3	2585.1	587.3	-1394000.0	-449514.8	4504.0
593.277	-939.7	3309.8	2316.1	-1689000.0	899739.1	11787.0
593.278	-927.1	-2063.3	-2326.7	853944.1	689026.8	155.0
593.279	-2518.1	-1175.0	-608.4	431520.0	2036536.0	7445.0
593.280	1236.4	2528.5	848.5	-1239000.0	-833510.8	2332.0
593.281	-357.7	3316.8	2603.4	-1570000.0	516042.2	9614.0
593.282	-350.0	-1976.1	-2027.4	843893.0	309734.5	-2033.0
593.283	-1940.5	-977.9	-307.3	346801.0	1656986.0	5259.0
593.284	555.0	1279.9	-569.7	-1199000.0	-392213.8	4198.0
593.285	-1038.8	1998.9	1150.4	-1492000.0	957612.3	11479.0
593.286	-778.1	-861.6	-1892.5	-74836.0	570366.8	411.0
593.287	-2368.7	-52.7	-183.1	-433402.0	1917416.0	7702.0
593.288	1088.5	1489.6	398.4	-438037.0	-715809.9	2080.0
593.289	-507.4	2341.2	2152.1	-829401.0	635280.7	9356.0
593.290	-252.2	-306.0	-901.1	379532.0	252862.7	-1729.0
593.291	-1844.2	698.0	823.3	-112510.0	1600403.0	5558.0
593.292	677.6	2542.0	231.4	-1765000.0	-479278.5	4475.0
593.293	-916.4	3260.7	1958.5	-2057000.0	869646.8	11756.0
593.294	-903.0	-2120.5	-2681.5	489989.0	659326.4	126.0
593.295	-2493.7	-1365.8	-971.1	163444.0	2006723.0	7417.0
593.296	1211.1	2756.4	1200.2	-1008000.0	-802925.6	2357.0
593.297	-384.4	3642.6	2954.4	-1415000.0	547842.4	9634.0
593.298	-376.5	-1636.2	-1678.7	989668.0	341321.4	-2012.0
593.299	-1967.0	-626.9	39.3	490310.0	1688267.0	5279.0
963.1	555.4	11.4	-143.2	35959.0	-107070.3	5677.0
963.2	398.5	19.1	-185.1	35679.0	64880.7	12548.0
963.3	-143.4	13.6	-218.6	75806.0	686918.9	3582.0
963.4	-300.3	20.1	-255.4	76597.0	858840.9	10453.0
963.5	428.5	8.7	-110.3	27682.0	-83770.8	4369.0
963.6	271.6	16.5	-152.1	27285.0	88176.2	11240.0
963.7	-270.3	10.7	-186.3	67739.0	710214.4	2274.0
963.8	-427.2	17.3	-221.5	68342.0	882123.4	9145.0
963.9	241.6	26.8	-221.3	35080.0	236788.7	19419.0
963.10	66.3	13.2	-195.2	63716.0	448754.3	4210.0
963.11	-247.5	27.4	-268.0	63777.0	792548.3	17952.0
963.12	114.7	24.0	-186.1	26844.0	260077.2	18111.0
963.13	-60.7	10.2	-163.0	55617.0	472023.5	2902.0
963.14	-374.5	24.5	-233.5	55565.0	815815.5	16644.0
963.15	-90.7	20.1	-233.5	64051.0	620646.1	11081.0
963.16	-217.6	17.2	-200.2	55898.0	643932.5	9773.0
963.17	626.1	8.3	-121.6	35681.0	-184564.4	2586.0
963.18	469.2	15.4	-165.8	36003.0	-12589.4	9457.0
963.19	-72.7	10.4	-199.8	75661.0	609447.9	491.0
963.20	-229.6	16.8	-239.2	76584.0	781382.9	7362.0
963.21	499.2	5.4	-88.6	27528.0	-161263.9	1278.0
963.22	342.3	12.9	-133.0	27597.0	10709.2	8149.0
963.23	-199.6	7.4	-166.2	67518.0	632737.4	-817.0
963.24	-356.5	13.9	-206.2	68511.0	804675.4	6054.0
963.25	312.3	23.5	-204.9	35260.0	159332.7	16328.0
963.26	137.0	10.3	-175.7	63240.0	371277.3	1119.0
963.27	-176.8	24.1	-252.0	63945.0	715101.4	14861.0
963.28	185.4	20.7	-170.8	26952.0	182622.2	15020.0
963.29	10.0	7.2	-144.0	55291.0	394549.5	-189.0

963.30	-303.8	21.3	-217.8	55702.0	738361.5	13553.0
963.31	673.3	5.8	-107.4	35788.0	-236205.8	525.0
963.32	516.3	13.0	-152.5	36181.0	-64248.1	7396.0
963.33	184.1	8.2	-163.3	63142.0	319623.6	-941.0
963.34	27.2	14.7	-204.3	64032.0	491562.6	5930.0
963.35	546.4	3.1	-73.8	27420.0	-212908.3	-783.0
963.36	389.4	10.4	-119.8	27826.0	-40949.6	6088.0
963.37	57.2	5.0	-132.1	55312.0	342923.1	-2249.0
963.38	-99.7	11.8	-172.0	55921.0	514856.1	4622.0
963.39	-20.0	16.7	-215.9	64125.0	543188.0	7990.0
963.40	-146.9	13.8	-183.5	56088.0	566482.5	6682.0
963.41	527.1	12.6	-151.1	36023.0	-76080.8	6913.0
963.42	370.2	20.5	-192.6	35563.0	95861.2	13784.0
963.43	-171.7	14.7	-226.3	76117.0	717905.5	4818.0
963.44	-328.6	21.5	-261.8	76507.0	889813.5	11689.0
963.45	400.2	10.0	-118.2	27712.0	-52781.3	5605.0
963.46	243.3	17.9	-159.4	27153.0	119156.7	12476.0
963.47	-298.6	11.8	-193.4	67884.0	741196.0	3510.0
963.48	-455.5	18.7	-228.0	68249.0	913508.0	10381.0
963.49	213.3	28.1	-227.9	35010.0	267769.3	20655.0
963.50	38.0	14.3	-202.8	63848.0	479737.9	5447.0
963.51	-275.8	28.7	-274.4	63743.0	823525.9	19189.0
963.52	86.4	25.2	-192.7	26832.0	291056.7	19347.0
963.53	-88.9	11.5	-170.7	55705.0	503030.4	4139.0
963.54	-402.7	25.7	-239.8	55544.0	846819.4	17881.0
963.55	-118.9	21.4	-240.3	63985.0	651644.9	12318.0
963.56	-245.8	18.5	-206.8	55835.0	674931.4	11010.0
963.57	508.3	13.5	-156.1	36055.0	-55405.5	7737.0
963.58	351.4	21.5	-197.4	35459.0	116532.5	14608.0
963.59	19.1	15.2	-207.6	63878.0	500383.8	6271.0
963.60	-137.8	22.3	-244.7	63938.0	672284.8	13142.0
963.61	381.4	10.8	-123.4	27731.0	-32106.0	6429.0
963.62	224.4	18.9	-163.6	26998.0	139798.6	13300.0
963.63	-107.8	12.3	-175.5	55799.0	523677.3	4963.0
963.64	-264.7	19.4	-211.2	55795.0	695572.3	11834.0
963.108	1238.5	753.4	2.0	-565524.0	-1001978.0	1031.0
963.109	784.0	606.9	-329.5	-467966.0	-486598.8	2499.0
963.110	167.3	-257.9	-1254.3	23521.0	213699.9	-2024.0
963.111	-286.1	-440.7	-1814.4	148298.0	727434.3	-553.0
963.112	580.3	822.9	-606.2	-377236.0	-255540.9	7616.0
963.113	125.3	719.6	-1011.6	-310149.0	260052.8	9083.0
963.114	-491.3	107.2	-950.7	-63254.0	960430.9	4570.0
963.115	-945.3	20.9	-1488.6	-9427.0	1474319.0	6038.0
963.116	1142.9	898.4	-192.9	-660447.0	-893217.7	646.0
963.117	687.6	752.3	-507.6	-563172.0	-377291.0	2111.0
963.118	262.6	-378.4	-1223.9	99733.0	105634.2	-1635.0
963.119	-191.1	-562.6	-1783.5	225571.0	619720.6	-165.0
963.120	484.9	977.4	-810.6	-480684.0	-147313.6	7231.0
963.121	29.9	879.4	-1227.3	-417423.0	368159.2	8697.0
963.122	-392.9	-57.8	-872.5	46565.0	848720.2	4964.0
963.123	-846.8	-156.2	-1436.0	109425.0	1363294.0	6432.0
963.124	522.9	1060.0	-360.8	-1098000.0	-190726.7	1163.0
963.125	68.5	910.5	-718.3	-997526.9	324207.2	2631.0
963.126	-548.2	27.2	-1355.4	-498156.0	1025004.0	-1896.0
963.127	-1002.6	-156.8	-1915.2	-371611.0	1539791.0	-428.0
963.128	1296.0	1173.9	-768.2	-414391.0	-1066399.0	7508.0
963.129	840.9	1093.9	-1235.7	-365479.0	-550940.8	8973.0
963.130	223.4	490.5	-1010.3	-116376.0	150297.1	4457.0
963.131	-230.7	411.8	-1483.3	-68266.0	664894.0	5925.0
963.132	426.6	1205.7	-552.3	-1193000.0	-81426.6	771.0

963.133	-28.5	1056.4	-912.8	-1092000.0	434271.8	2237.0
963.134	-452.8	-99.4	-1321.6	-418052.0	916192.6	-1507.0
963.135	-906.6	-286.4	-1879.1	-289922.0	1431132.0	-38.0
963.136	1197.5	1336.9	-995.7	-521665.0	-955373.8	7110.0
963.137	743.4	1254.8	-1458.1	-471560.0	-440410.0	8579.0
963.138	321.2	336.4	-786.3	-14318.0	39484.3	4851.0
963.139	-132.5	246.2	-1351.6	42401.0	553539.6	6320.0
963.140	2258.8	1742.2	-559.8	-998138.0	-2159281.0	6898.0
963.141	1804.0	1588.7	-910.4	-888870.0	-1644596.0	8363.0
963.142	-1323.3	-1154.3	-4204.4	542068.0	1904477.0	-3308.0
963.143	-1776.7	-1270.6	-4757.7	612912.0	2418518.0	-1838.0
963.144	2058.8	1709.6	-523.5	-888836.1	-1932991.0	8860.0
963.145	1604.0	1555.7	-875.2	-779108.0	-1417306.0	10326.0
963.146	-1519.3	-957.8	-4108.4	437124.0	2126782.0	-1323.0
963.147	-1972.7	-1074.2	-4661.7	507997.0	2640822.0	147.0
963.148	2044.7	1832.5	-657.0	-1158000.0	-1916566.0	6938.0
963.149	1590.3	1691.5	-968.2	-1065000.0	-1401779.0	8406.0
963.150	-1539.1	-1233.9	-4212.6	533121.0	2149761.0	-3279.0
963.151	-1992.3	-1354.8	-4770.0	606794.0	2662852.0	-1808.0
963.152	2272.7	1644.5	-378.7	-751646.0	-2174757.0	8819.0
963.153	1817.5	1497.0	-717.9	-645886.0	-1659173.0	10284.0
963.154	-1304.1	-866.2	-4089.4	439400.0	1883346.0	-1355.0
963.155	-1757.6	-985.0	-4644.2	513449.0	2397361.0	115.0
963.156	1941.6	2200.0	-1261.7	-1298000.0	-1799707.0	5620.0
963.157	1486.3	2055.1	-1595.2	-1194000.0	-1284149.0	7083.0
963.158	-997.7	-1629.5	-4069.9	852313.9	1535033.0	-1989.0
963.159	-1450.8	-1752.0	-4628.8	926908.0	2049150.0	-517.0
963.160	1741.2	2173.4	-1196.6	-1193000.0	-1572519.0	7580.0
963.161	1285.9	2028.5	-1530.1	-1089000.0	-1056960.0	9043.0
963.162	-1193.8	-1432.6	-3972.6	749089.0	1757312.0	-4.1
963.163	-1646.9	-1555.1	-4531.4	823723.1	2271429.0	1467.0
963.164	1728.0	2287.5	-1373.2	-1458000.0	-1557866.0	5663.0
963.165	1273.2	2155.1	-1667.6	-1369000.0	-1042180.0	7129.0
963.166	-1212.9	-1720.2	-4088.5	848634.0	1779469.0	-1957.0
963.167	-1666.2	-1842.2	-4647.7	923013.0	2293535.0	-486.0
963.168	1954.1	2127.4	-1000.2	-1068000.0	-1813538.0	7534.0
963.169	1498.8	1982.5	-1333.7	-964219.1	-1297979.0	8998.0
963.170	-977.6	-1359.4	-3969.6	762791.0	1513130.0	-31.0
963.171	-1431.0	-1476.3	-4523.4	834241.0	2026170.0	1439.0
963.268	1540.4	779.0	254.2	-469637.0	-1343432.0	1626.0
963.269	25.0	311.3	-790.9	-159303.0	373576.7	6516.0
963.270	464.4	-180.1	-485.5	76265.0	-122877.4	-1443.0
963.271	-1046.7	-641.9	-2347.7	372061.0	1589609.0	3459.0
963.272	1342.2	718.6	258.3	-347294.0	-1118685.0	3596.0
963.273	-174.6	289.0	-926.2	-49936.0	599778.2	8483.0
963.274	268.4	-37.5	-391.8	14097.0	99346.8	542.0
963.275	-1243.7	-440.9	-2254.0	275928.0	1812660.0	5441.0
963.276	1445.6	909.4	26.0	-555639.0	-1236468.0	1245.0
963.277	-71.5	457.2	-975.8	-254474.0	483012.2	6128.0
963.278	562.4	-311.0	-449.1	157405.0	-234055.5	-1045.0
963.279	-950.3	-791.2	-2313.9	470290.0	1480052.0	3851.0
963.280	1246.6	863.2	71.2	-442102.0	-1010925.0	3211.0
963.281	-269.8	446.6	-1144.6	-155116.0	707794.2	8098.0
963.282	366.3	-187.1	-356.9	113141.0	-11736.6	939.0
963.283	-1145.5	-597.7	-2215.9	378562.0	1701558.0	5837.0
963.284	1325.9	871.2	154.4	-629340.0	-1100818.0	1665.0
963.285	-189.7	402.7	-896.4	-318401.0	616789.6	6555.0
963.286	250.6	-105.1	-503.0	-72801.0	119371.6	-1402.0
963.287	-1261.2	-647.5	-2371.5	292416.0	1832223.0	3496.0
963.288	1556.2	761.6	311.7	-302303.0	-1361426.0	3558.0

963.289	40.0	403.0	-994.8	-67441.0	356512.0	8449.0
963.290	483.1	72.8	-361.0	-1121.0	-143993.0	509.0
963.291	-1029.2	-324.5	-2227.7	259604.0	1570046.0	5408.0
963.292	1230.5	1017.6	-43.1	-725310.0	-992006.8	1280.0
963.293	-285.7	546.5	-1087.6	-412239.0	725761.8	6168.0
963.294	348.0	-226.5	-468.9	1805.0	8911.4	-1007.0
963.295	-1164.9	-784.0	-2336.8	379157.0	1723640.0	3888.0
963.296	1460.7	915.4	106.7	-405383.0	-1253640.0	3173.0
963.297	-55.3	559.7	-1218.2	-172283.0	464713.7	8064.0
963.298	581.2	-75.4	-325.4	96217.0	-255170.8	906.0
963.299	-931.4	-485.0	-2191.5	366829.0	1458844.0	5801.0

### Calcolo resistenze

Resistenza a trazione dei bulloni

$$F_{tb,Rd} = 0.9 \cdot f_{tb} \cdot A_{res} / \gamma_{M2} = 141145.5 \text{ N}$$

Resistenza a punzonamento flangia

$$B_{pf,Rd} = 0.6 \cdot \pi \cdot d_m \cdot t_f \cdot f_{tk} / \gamma_{M2} = 576796.4 \text{ N}$$

Bull.	$F_{f,Rd}$ [N]	$F_{t,Rd}$ [N]
1	163051.0	141145.5
2	95401.9	95401.9
3	95401.9	95401.9
4	163051.0	141145.5
5	163277.8	141145.5
6	95514.9	95514.9
7	95514.9	95514.9
8	163277.8	141145.5

### Legenda

$F_{f,Rd} = M_{res,m} / (B_m \cdot R_m)$  resistenza a flessione flangia

$F_{t,Rd} = \min [ F_{tb,Rd}, B_{pf,Rd}, F_{f,Rd} ]$  resistenza a trazione di progetto

Resistenza a taglio dei bulloni

$$F_{vb,Rd} = 0.6 \cdot f_{tb} \cdot A_{res} / \gamma_{M2} = 94097.0 \text{ N}$$

Bull.	$F_{bf,x,Rd}$ [N]	$F_{v,x,Rd}$ [N]	$F_{bf,y,Rd}$ [N]	$F_{v,y,Rd}$ [N]
1	236381.0	94097.0	345878.2	94097.0
2	154435.6	94097.0	243251.2	94097.0
3	154435.6	94097.0	243251.2	94097.0
4	236381.0	94097.0	345878.2	94097.0
5	236785.7	94097.0	346929.5	94097.0
6	154700.0	94097.0	243990.5	94097.0
7	154700.0	94097.0	243990.5	94097.0
8	236785.7	94097.0	346929.5	94097.0

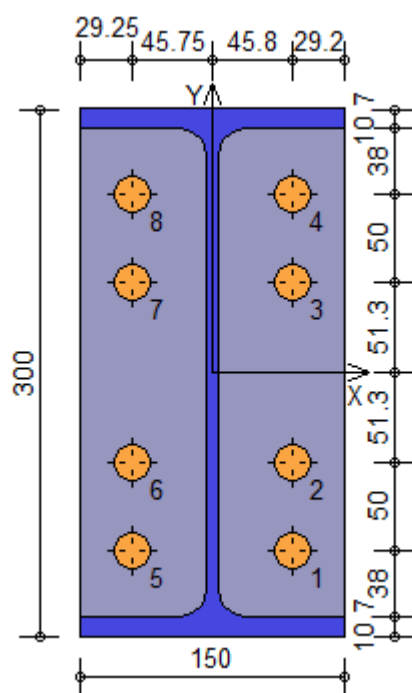
### Legenda

$F_{bf,x,Rd} = k \cdot \alpha \cdot f_{tk} \cdot \emptyset \cdot t_f / \gamma_{M2}$  resistenza a rifollamento flangia in direzione x

$F_{v,x,Rd} = \min [ F_{vb,Rd}, F_{bf,x,Rd} ]$  resistenza a taglio di progetto in direzione x

$F_{bf,y,Rd} = k \cdot \alpha \cdot f_{tk} \cdot \emptyset \cdot t_f / \gamma_{M2}$  resistenza a rifollamento flangia in direzione y

$F_{v,y,Rd} = \min [ F_{vb,Rd}, F_{bf,y,Rd} ]$  resistenza a taglio di progetto in direzione y



### Verifiche sui bulloni

#### 1-Taglio e trazione (Nodo n. 200, CMB n. 51)

Bull.	X [mm]	Y [mm]	$F_{v,Ed}$ [N]	$F_{v,Rd}$ [N]	$F_{t,Ed}$ [N]	$F_{t,Rd}$ [N]	FV <sub>1</sub>	VER
1	45.80	-101.30	3253.2	94097.0	124685.4	141145.5	0.665560	Ok
2	45.80	-51.30	3253.3	94097.0	93351.9	95401.9	0.733511	Ok
3	45.80	51.30	3253.3	94097.0	29055.6	95401.9	0.252117	Ok
4	45.80	101.30	3253.3	94097.0	0.0	141145.5	0.034574	Ok
5	-45.75	-101.30	3250.5	94097.0	124310.3	141145.5	0.663633	Ok
6	-45.75	-51.30	3250.5	94097.0	92976.8	95514.9	0.729849	Ok
7	-45.75	51.30	3250.5	94097.0	28680.5	95514.9	0.249025	Ok
8	-45.75	101.30	3250.6	94097.0	0.0	141145.5	0.034545	Ok

#### 2-Trazione (Nodo n. 200, CMB n. 51)

Bull.	X [mm]	Y [mm]	$F_{t,Ed}$ [N]	$F_{t,Rd}$ [N]	FV <sub>2</sub>	VER
1	45.80	-101.30	124685.4	141145.5	0.883382	Ok
2	45.80	-51.30	93351.9	95401.9	0.978512	Ok
3	45.80	51.30	29055.6	95401.9	0.304560	Ok
4	45.80	101.30	0.0	141145.5	0.000000	Ok
5	-45.75	-101.30	124310.3	141145.5	0.880725	Ok
6	-45.75	-51.30	92976.8	95514.9	0.973427	Ok
7	-45.75	51.30	28680.5	95514.9	0.300273	Ok
8	-45.75	101.30	0.0	141145.5	0.000000	Ok

#### Legenda

$F_{v,Ed}$  forza di taglio agente sul bullone

$F_{v,Rd}$  resistenza a taglio di progetto del bullone

$F_{t,Ed}$  forza di trazione agente sul bullone

$F_{t,Rd}$  resistenza a trazione di progetto del bullone

$FV_1 = F_{v,Ed} / F_{v,Rd} + F_{t,Ed} / (1.4 \cdot F_{t,Rd})$

$FV_2 = F_{t,Ed} / F_{t,Rd}$

VER  $\rightarrow FV_i \leq 1$

### Verifiche sulle saldature profilo-flangia (versione beta)

Si considera la sezione di gola (avente altezza  $a = s_c / 2^{0.5} = 9.192$ ) in posizione ribaltata: vengono considerate positive le tensioni normali di trazione e le tensioni tangenziali agenti verso destra e verso il basso. Tutte le tensioni sono espresse in N/mm<sup>2</sup>.

#### Verifica formula (4.2.84) (Nodo n. 200, CMB n. 51)

Cordoni	$n_{\perp}$	$t_{\perp}$	$\tau_{\parallel}$	FV <sub>1</sub>	VER <sub>1</sub>
Ala inferiore interno lato destro	223.11	0.00	-0.14	223.11	Ok
Ala inferiore interno lato sinistro	217.70	0.00	-0.14	217.70	Ok



Anima lato destro	-211.54	0.00	-5.69	211.61	Ok
Anima lato sinistro	-211.54	0.00	-5.69	211.61	Ok
Ala superiore interno lato destro	-227.75	0.00	-0.14	227.75	Ok
Ala superiore interno lato sinistro	-233.16	0.00	-0.14	233.16	Ok
<b>Verifica formula (4.2.85) (Nodo n. 200, CMB n. 51)</b>					
Cordoni	$n_{\perp}$	$t_{\perp}$	$\tau_{\parallel}$	$FV_2$	$VER_2$
Ala inferiore interno lato destro	223.11	0.00	-0.14	223.11	Ok
Ala inferiore interno lato sinistro	217.70	0.00	-0.14	217.70	Ok
Anima lato destro	-211.54	0.00	-5.69	211.54	Ok
Anima lato sinistro	-211.54	0.00	-5.69	211.54	Ok
Ala superiore interno lato destro	-227.75	0.00	-0.14	227.75	Ok
Ala superiore interno lato sinistro	-233.16	0.00	-0.14	233.16	Ok

#### Legenda

$n_{\perp}$  tensione normale perpendicolare all'asse del cordone

$t_{\perp}$  tensione tangenziale perpendicolare all'asse del cordone

$\tau_{\parallel}$  tensione tangenziale parallela all'asse del cordone

$$FV_1 = (n_{\perp}^2 + t_{\perp}^2 + \tau_{\parallel}^2)^{0.5}$$

$$FV_2 = |n_{\perp}| + |t_{\perp}|$$

$$VER_i \rightarrow FV_i \leq \beta_i \cdot f_{yk} \quad (\beta_1 \cdot f_{yk} = 248.50 \text{ N/mm}^2 \quad \beta_2 \cdot f_{yk} = 301.75 \text{ N/mm}^2)$$

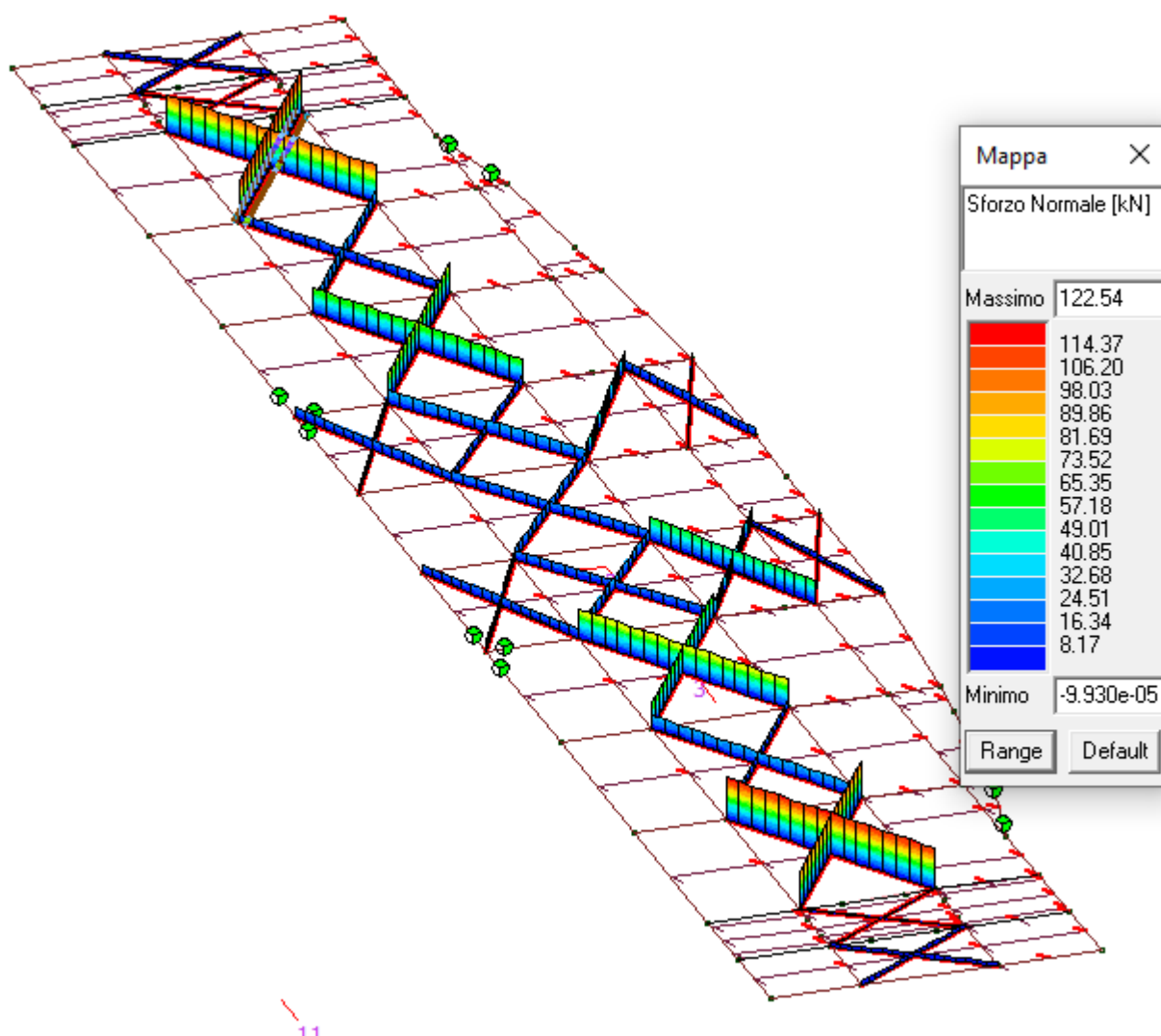
#### **Verifica del momento di progetto del giunto** (Nodo n. 200, CMB n. 51)



Momento resistente del giunto  $M_{j,Rd} = 116562200.0 \text{ N mm}$

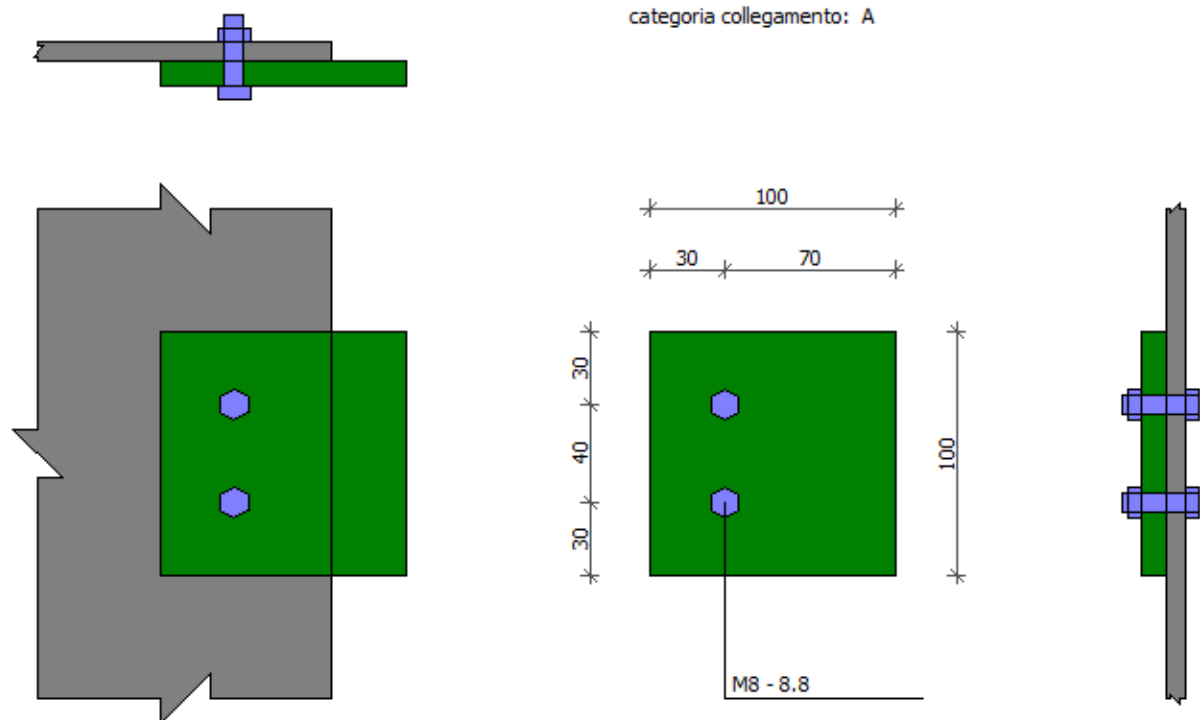
Momento di progetto  $M_{j,Ed} = 97281620.0 \text{ N mm}$

$$M_{j,Ed} / M_{j,Rd} = 0.834590 \quad \text{Ok}$$

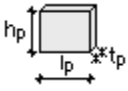
## COLLEGAMENTO CONTROVENTI DI FALDA

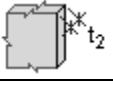


	<b>Piastra a piastra</b>	Rapporto: 0.97	
PlateToPlate v. 1.0.0.10	EN 1993-1-8:2006		



### Dati

Piastra			
	$l_p$	$h_p$	$t_p$
	150.00[mm]	108.00[mm]	8.00[mm]
Materiale	Grado	$f_y$	$f_u$
	S 275	275.00[MPa]	430.00[MPa]

Elemento			
	$t_2$		
	5.00[mm]		
Materiale	Grado	$f_y$	$f_u$
	S 275	275.00[MPa]	430.00[MPa]

### **Bulloni di collegamento piastra ed elementi**

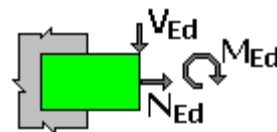
Grado bullone	Grado	8.8
Limite di snervamento	$f_{yb} =$	640.00 [MPa]
Resistenza a tensione	$f_{ub} =$	800.00 [MPa]
Diametro bullone	$d =$	12.00 [mm]
Diametro apertura bullone	$d_o =$	14.00 [mm]
Area sezione bullone	$A =$	1.13 [cm <sup>2</sup> ]

Area effettiva sezione bullone	$A_s =$	0.84 [cm <sup>2</sup> ]
Numero righe	$w =$	2.00
Numero colonne	$k =$	2.00
Distanza dal bordo orizzontale	$e_1 =$	29.00 [mm]
Distanza dal bordo verticale	$e_2 =$	50.00 [mm]
Spaziatura verticale	$p_1 =$	50.00 [mm]
Spaziatura orizzontale	$p_2 =$	50.00 [mm]

### Forze

#### Carichi di progetto

Forza assiale	$N_{Ed} =$	125.00	[kN]
Forza di taglio	$V_{Ed} =$	0.00	[kN]
Momento flettente	$M_{Ed} =$	0.00	[kNm]



### Risultati

#### **Bulloni di collegamento piastra ed elementi**

Area della sezione di taglio del bullone

$$A = A_s = 0.84 [\text{cm}^2]$$

Resistenza al taglio del bullone in una superficie

$$F_{v,Rd} = (\alpha_v \cdot m \cdot f_{ub} \cdot A) / \gamma_{M2} = (0.60 \cdot 1 \cdot 800.00 [\text{MPa}] \cdot 0.84 [\text{cm}^2]) / 1.25 = 32.37 [\text{kN}]$$

Bullone di supporto

#### **Bullone di supporto sull'elemento**

	$e_{21} = 50.00 [\text{mm}]$
$e_{2min} = \min[ e_{21} ] = 50.00 [\text{mm}]$	

#### **Direzione X**

Coefficiente determinato dalla spaziatura bulloni

$$k_{1x} = \min[1.4 \cdot (p_1/d_0) - 1.7; 2.5] = \min[1.4 \cdot (50.00 [\text{mm}] / 14.00 [\text{mm}]) - 1.7; 2.5] = 2.50$$

$$k_{1x} > 0 \quad 2.50 > 0.00$$



Coefficiente determinato dalla spaziatura bulloni

$$\alpha_{bx} = \min[e_{2min}/(3 \cdot d_0); p_2/(3 \cdot d_0) - 0.25; f_{ub}/f_u; 1] = \min[50.00 [\text{mm}] / (3 \cdot 14.00 [\text{mm}]); (50.00 [\text{mm}] / (3 \cdot 14.00 [\text{mm}])) - 0.25; 800.00 [\text{MPa}] / 430.00 [\text{MPa}]; 1] = 0.94$$

$$\alpha_{bx} > 0 \quad 0.94 > 0.00$$



Resistenza del bullone di supporto

$$F_{b,Rd1x} = (k_{1x} \cdot \alpha_{bx} \cdot f_u \cdot d \cdot \Sigma t_i) / \gamma_{M2} = (2.50 \cdot 0.94 \cdot 430.00 [\text{MPa}] \cdot 12.00 [\text{mm}] \cdot 5.00 [\text{mm}]) / 1.25 = 48.53 [\text{kN}]$$

## Direzione Z

Coefficiente determinato dalla spaziatura bulloni

$$k_{1z} = \min[2.8 \cdot (e_{2\min}/d_0) - 1.7; 1.4 \cdot (p_2/d_0) - 1.7; 2.5] = \min[2.8 \cdot (50.00[mm]/14.00[mm]) - 1.7; 1.4 \cdot (50.00[mm]/14.00[mm]) - 1.7; 2.5] = 2.50$$

$$k_{1z} > 0 \quad 2.50 > 0.00$$



Coefficiente determinato dalla spaziatura bulloni

$$\alpha_{bz} = \min[p_1/(3 \cdot d_0) - 0.25; f_{ub}/f_u; 1] = \min[(50.00[mm]/(3 \cdot 14.00[mm])) - 0.25; 800.00[MPa]/430.00[MPa]; 1] = 0.94$$

$$\alpha_{bz} > 0 \quad 0.94 > 0.00$$

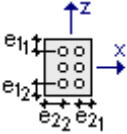


Resistenza del bullone di supporto

$$F_{b,Rd1z} = (k_{1z} \cdot \alpha_{bz} \cdot f_u \cdot d \cdot \Sigma t_i) / \gamma_{M2} = (2.50 \cdot 0.94 \cdot 430.00[MPa] \cdot 12.00[mm] \cdot 5.00[mm]) / 1.25 = 48.53[kN]$$

Bullone di supporto

## Bullone di supporto sulla piastra

	$e_{11} = 29.00[mm]$
	$e_{12} = 29.00[mm]$
	$e_{21} = 50.00[mm]$
	$e_{22} = 50.00[mm]$
$e_{1\min} = \min[e_{11}; e_{12}] = 29.00[mm]$	
$e_{2\min} = \min[e_{21}; e_{22}] = 50.00[mm]$	

## Direzione X

Coefficiente determinato dalla spaziatura bulloni

$$k_{1x} = \min[2.8 \cdot (e_{1\min}/d_0) - 1.7; 1.4 \cdot (p_1/d_0) - 1.7; 2.5] = \min[2.8 \cdot (29.00[mm]/14.00[mm]) - 1.7; 1.4 \cdot (50.00[mm]/14.00[mm]) - 1.7; 2.5] = 2.50$$

$$k_{1x} > 0 \quad 2.50 > 0.00$$



Coefficiente determinato dalla spaziatura bulloni

$$\alpha_{bx} = \min[e_{2\min}/(3 \cdot d_0); p_2/(3 \cdot d_0) - 0.25; f_{ub}/f_u; 1] = \min[50.00[mm]/(3 \cdot 14.00[mm]); (50.00[mm]/(3 \cdot 14.00[mm])) - 0.25; 800.00[MPa]/430.00[MPa]; 1] = 0.94$$

$$\alpha_{bx} > 0 \quad 0.94 > 0.00$$



Resistenza del bullone di supporto

$$F_{b,Rd2x} = (k_{1x} \cdot \alpha_{bx} \cdot f_u \cdot d \cdot \Sigma t_i) / \gamma_{M2} = (2.50 \cdot 0.94 \cdot 430.00[MPa] \cdot 12.00[mm] \cdot 8.00[mm]) / 1.25 = 77.65[kN]$$

## Direzione Z

Coefficiente determinato dalla spaziatura bulloni

$$k_{1z} = \min[2.8 \cdot (e_{2\min}/d_0) - 1.7; 1.4 \cdot (p_2/d_0) - 1.7; 2.5] = \min[2.8 \cdot (50.00[mm]/14.00[mm]) - 1.7; 1.4 \cdot (50.00[mm]/14.00[mm]) - 1.7; 2.5] = 2.50$$

$$k_{1z} > 0 \quad 2.50 > 0.00$$



Coefficiente determinato dalla spaziatura bulloni



$$\alpha_{bz} = \min[e_{1\min}/(3*d_0); p_1/(3*d_0)-0.25; f_{ub}/f_u; 1] = \min[29.00[mm]/(3*14.00[mm]); (50.00[mm]/(3*14.00[mm]))-0.25; 800.00[MPa]/430.00[MPa]; 1] = 0.69$$

$$\alpha_{bz} > 0$$

$$0.69 > 0.00$$



Resistenza del bullone di supporto

$$F_{b,Rd2z} = (k_{1z} * \alpha_{bz} * f_u * d * \Sigma t_i) / \gamma_{M2} = (2.50 * 0.69 * 430.00[MPa] * 12.00[mm] * 8.00[mm]) / 1.25 = 57.01[kN]$$

### Stato limite ultimo

#### **Forze nei bulloni**

Forza assiale

$$N_0 = N_{Ed} = 125.00[kN]$$

Forza di taglio

$$V_0 = V_{Ed} = 0.00[kN]$$

Eccentricità della forza relativa al baricentro dei bulloni

$$e_0 = 75.00[mm]$$

Momento flettente reale

$$M_0 = M_{Ed} + V_0 * e_0 = 0.00[kNm] + 0.00[kN] * 75.00[mm] = 0.00[kNm]$$

#### **Direzione X**

Componente di forza nel bullone dovuta all'azione longitudinale

$$F_{N,Ed} = N_0/n_b = 125.00[kN]/4 = 31.25[kN]$$

Forza totale sul bullone nella direzione X

$$F_{x,Ed} = F_{N,Ed} = 31.25[kN]$$

Progetto effettivo di capacità del bullone

$$F_{x,Rd} = \min[F_{b,Rd1x}; F_{b,Rd2x}] = \min[48.53[kN]; 77.65[kN]] = 48.53[kN]$$

$$|F_{x,Ed}| \leq F_{x,Rd}$$

$$|31.25[kN]| < 48.53[kN]$$

$$0.64$$



Risultante forza di taglio nel bullone

$$F_{Ed} = F_{x,Ed} = 31.25[kN]$$

$$F_{Ed} \leq F_{v,Rd}$$

$$31.25[kN] < 32.37[kN]$$

$$0.97$$

