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**PHOTON AND DECAY DATA LIBRARIES FOR ORIGEN2 CODE**  
**BASED ON JENDL FP DECAY DATA FILE 2000**

**November 2002**

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## Photon and Decay Data Libraries for ORIGEN2 Code Based on JENDL FP Decay Data File 2000

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Photon and decay data libraries for the ORIGEN2 code have been updated by using JENDL FP Decay Data File 2000 (JENDL/FPD-00). As for the decay data, half-lives, branching ratios and recoverable energy values have been replaced with those of the JENDL/FPD-00 file. The data of the photon library has been also replaced with those of the JENDL/FPD-00 file in which photon data of the nuclides without measured data are calculated with a theoretical method. Using the updated photon library, the calculation of photon spectrum at a short time after fission event is able to be made.

**Keywords:** Decay Data, Photon Spectrum, Fission Products, ORIGEN2, JENDL FP Decay Data File 2000

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## JENDL 核分裂生成物崩壊データファイル 2000 に基づく ORIGEN2 用光子及び崩壊データライブラリー

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ORIGEN2 コード用の光子及び崩壊データデータのライブラリーを JENDL 核分裂生成物崩壊データライブラリー 2000 (JENDL/FPD-00) に基づいて作成した。崩壊データに関しては、半減期、分岐比、再生 (recoverable) エネルギーについて JENDL/FPD-00 のもので置き換えた。光子ライブラリーについても、JENDL/FPD-00 のデータを基に作り直した。JENDL/FPD-00 の光子データは、測定データのない核種には理論計算による計算値を採用しているものである。この結果、核分裂後の極短時間における光子スペクトルも ORIGEN2 コードで計算できるようになった。

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## 1 Introduction

The ORIGEN2 code <sup>1,2)</sup> is a widely used computer code for calculating the buildup and decay of isotopes in nuclear materials. The number of fission product nuclides which are included in its decay data library is 858, but that of its photon library is 240. The difference between the numbers of the nuclides for the decay data and for the photon data comes from the deficiency of the measured spectrum data of the nuclides with short half-life. The main source of the ORIGEN2 photon library is ENSDF (Evaluated Nuclear Structure Data File) file <sup>3)</sup>. The ENSDF file has been compiled based on only the measured data. Therefore the ENSDF file does not include the spectrum of the nuclides with no measurements. Then the ORIGEN2 photon library also does not include the spectrum for such nuclides. In this reason the photon spectrum calculated at short time after fission event is not correctly estimated when the photon data of the ORIGEN2 code are used.

JENDL FP Decay Data File 2000 <sup>4)</sup> (hereafter JENDL/FPD-00) was released in 2000. This JENDL/FPD-00 file contains beta- and gamma-ray spectrum data of all unstable fission product nuclides. When the measured spectrum data were not available at the time of the compilation, a theoretical model was applied to estimate the spectrum data and the theoretically estimated spectra were included in the JENDL/FPD-00 file. The theoretically estimated spectrum data were validated by comparing the calculated aggregate beta- and gamma-ray spectra of fission product nuclides after fissions of various kinds of fissionable nuclides with the measured spectrum data. The comparisons showed good agreement between the calculated results and the measured data.

Then it was expected that the replacement of the ORIGEN2 photon library with the data of the JENDL/FPD-00 file would improve the predictability of the spectrum at short times after fission event calculated by the ORIGEN2 code. The photon data including X-ray data were converted from those of the JENDL file to suite the format of the ORIGEN2 photon library. In this process the energy group structure of the photon library was kept to be the same as that in the original structure.

The decay data in the JENDL/FPD-00 file also have been validated by comparing the calculated decay heat values with the measured ones. The comparison also showed good agreement between them. Then it is reasonable to replace the data of the ORIGEN2 decay data library with those of the JENDL/FPD-00 file. The replacement was carried out except for the data of the natural abundance and the radioactivity concentration guides in the ORIGEN2 decay data library.

In this report the updated photon and decay libraries for the ORIGEN2 code is described.

## 2 Updated Photon and Decay Data Libraries

### 2.1 Photon Library

There are photon data of 240 FP nuclides with masses from 66 through 172 in the ORIGEN2 photon library with no bremsstrahlung, although there are decay data of 858 FP nuclides in the decay data library including 6 light nuclides produced by ternary fission. Excepting the light nuclides and stable nuclides, there are 724 unstable nuclides with masses from 66 through 172. These unstable nuclides emit radiations including photons through decay process to more stable nuclides. Although all unstable nuclides not always emit photons in the decay process, it is true that there is a gap between the number of nuclides in the decay data library and the photon library. It is due to the deficiency of the measured data of short-lived unstable nuclides. The decay data in the decay data library were taken from ENDF/B-IV <sup>5)</sup> when the measured data were not available. In the ENDF/B-IV file theoretically estimated decay data (half-life, average decay energy and so on) were adopted when the measured data were not available. The photon data, however, were not provided even in the ENDF/B-IV file because any theoretical methods to give the spectrum data were not given at the time of the compilation. In order to fulfil the gap, the photon data of about 500 FP nuclides are needed.

JENDL FP Decay Data File 2000 provides gamma-ray spectrum data for 1053 FP nuclides including theoretically estimated spectrum data. The spectra of the nuclides without measured data are provided by the calculation with a theoretical method. The number of nuclides with the gamma-ray spectrum in the JENDL/FPD-00 file is enough to make up the deficiency of the original photon library of the ORIGEN2 code. The spectrum data in the JENDL/FPD-00 file consist of measured discrete spectrum and theoretically calculated continuous one. They were merged and converted into the format of the ORIGEN2 photon library.

The format of the photon library is following <sup>2)</sup>:

- First card of each library segment:  
NLB TITLE
- First card for each nuclide:  
NLB NUCLID NGP(1), RPH(1), ... NGP(I), RPH(I)
- Subsequent card(s) for each nuclide:  
NGP(I+1), RPH(I+1), ... NGP(IMAX), RPH(IMAX), -1
- Last card of each library segment:  
-1

where

NLB        =   the number of this photon library segment,



- TITLE = a 72-character alphanumeric photon library segment title beginning in Column 9,
- NUCLIDE = a six-digit nuclide identifier for the photon information on the following card(s),
- NGP(I) = the number of a photon energy group,
- RPH(I) = photon intensity for energy group NGP(I) in photons per disintegration,
- IMAX = the number of NGP(I)/RPH(I) pairs specified must be less than 18.

Only those NGP(I)/RPH(I) pairs for which RPH(I) is non-zero need be specified.

The computer code SPEC5 <sup>6)</sup> was used for treating the JENDL/FPD-00 file. The code reads the decay data in the ENDF format and produces the spectrum data of gamma-ray, beta-ray, gamma + X-ray, beta + conversion electron and so on. The spectrum of gamma + X-ray is used for the ORIGEN2 photon library. The produced spectrum has the energy group structure of 209 energy bins, which is different from that of the ORIGEN2 photon library. The energy structure of the spectrum produced by the SPEC5 code is listed in Table 2.1 and that of the ORIGEN2 photon library is listed in Table 2.2.

**Table 2.1** Energy group structure of the spectrum produced by SPEC5 code

Group	Group energy (MeV)		Group	Group energy (MeV)	
	Lower energy	Upper energy		Lower energy	Upper energy
1	0.0	1.0E-02	20	5.5E-01	6.0E-01
2	1.0E-02	2.0E-02	21	6.0E-01	6.5E-01
3	2.0E-02	3.0E-02	22	6.5E-01	7.0E-01
4	3.0E-02	4.0E-02	23	7.0E-01	7.5E-01
5	4.0E-02	5.0E-02	24	7.5E-01	8.0E-01
6	5.0E-02	6.0E-02	25	8.0E-01	8.5E-01
7	6.0E-02	7.0E-02	26	8.5E-01	9.0E-01
8	7.0E-02	8.0E-02	27	9.0E-01	9.5E-01
9	8.0E-02	9.0E-02	28	9.5E-01	1.00
10	9.0E-02	1.0E-01	29	1.00	1.05
11	1.0E-01	1.5E-01	30	1.05	1.10
12	1.5E-01	2.0E-01	31	1.10	1.15
13	2.0E-01	2.5E-01	32	1.15	1.20
14	2.5E-01	3.0E-01	33	1.20	1.25
15	3.0E-01	3.5E-01	34	1.25	1.30
16	3.5E-01	4.0E-01	35	1.30	1.35
17	4.0E-01	4.5E-01	36	1.35	1.40
18	4.5E-01	5.0E-01	37	1.40	1.45
19	5.0E-01	5.5E-01	38	1.45	1.50

*continued on next page*

Group	Group energy (MeV)		Group	Group energy (MeV)	
	Lower energy	Upper energy		Lower energy	Upper energy
39	1.50	1.55	73	3.20	3.25
40	1.55	1.60	74	3.25	3.30
41	1.60	1.65	75	3.30	3.35
42	1.65	1.70	76	3.35	3.40
43	1.70	1.75	77	3.40	3.45
44	1.75	1.80	78	3.45	3.50
45	1.80	1.85	79	3.50	3.55
46	1.85	1.90	80	3.55	3.60
47	1.90	1.95	81	3.60	3.65
48	1.95	2.00	82	3.65	3.70
49	2.00	2.05	83	3.70	3.75
50	2.05	2.10	84	3.75	3.80
51	2.10	2.15	85	3.80	3.85
52	2.15	2.20	86	3.85	3.90
53	2.20	2.25	87	3.90	3.95
54	2.25	2.30	88	3.95	4.00
55	2.30	2.35	89	4.00	4.05
56	2.35	2.40	90	4.05	4.10
57	2.40	2.45	91	4.10	4.15
58	2.45	2.50	92	4.15	4.20
59	2.50	2.55	93	4.20	4.25
60	2.55	2.60	94	4.25	4.30
61	2.60	2.65	95	4.30	4.35
62	2.65	2.70	96	4.35	4.40
63	2.70	2.75	97	4.40	4.45
64	2.75	2.80	98	4.45	4.50
65	2.80	2.85	99	4.50	4.55
66	2.85	2.90	100	4.55	4.60
67	2.90	2.95	101	4.60	4.65
68	2.95	3.00	102	4.65	4.70
69	3.00	3.05	103	4.70	4.75
70	3.05	3.10	104	4.75	4.80
71	3.10	3.15	105	4.80	4.85
72	3.15	3.20	106	4.85	4.90
<i>continued on next page</i>					

Group	Group energy (MeV)		Group	Group energy (MeV)	
	Lower energy	Upper energy		Lower energy	Upper energy
107	4.90	4.95	141	6.60	6.65
108	4.95	5.00	142	6.65	6.70
109	5.00	5.05	143	6.70	6.75
110	5.05	5.10	144	6.75	6.80
111	5.10	5.15	145	6.80	6.85
112	5.15	5.20	146	6.85	6.90
113	5.20	5.25	147	6.90	6.95
114	5.25	5.30	148	6.95	7.00
115	5.30	5.35	149	7.00	7.05
116	5.35	5.40	150	7.05	7.10
117	5.40	5.45	151	7.10	7.15
118	5.45	5.50	152	7.15	7.20
119	5.50	5.55	153	7.20	7.25
120	5.55	5.60	154	7.25	7.30
121	5.60	5.65	155	7.30	7.35
122	5.65	5.70	156	7.35	7.40
123	5.70	5.75	157	7.40	7.45
124	5.75	5.80	158	7.45	7.50
125	5.80	5.85	159	7.50	7.60
126	5.85	5.90	160	7.60	7.70
127	5.90	5.95	161	7.70	7.80
128	5.95	6.00	162	7.80	7.90
129	6.00	6.05	163	7.90	8.00
130	6.05	6.10	164	8.00	8.10
131	6.10	6.15	165	8.10	8.20
132	6.15	6.20	166	8.20	8.30
133	6.20	6.25	167	8.30	8.40
134	6.25	6.30	168	8.40	8.50
135	6.30	6.35	169	8.50	8.60
136	6.35	6.40	170	8.60	8.70
137	6.40	6.45	171	8.70	8.80
138	6.45	6.50	172	8.80	8.90
139	6.50	6.55	173	8.90	9.00
140	6.55	6.60	174	9.00	9.10

*continued on next page*

Group	Group energy (MeV)		Group	Group energy (MeV)	
	Lower energy	Upper energy		Lower energy	Upper energy
175	9.10	9.20	193	10.90	11.00
176	9.20	9.30	194	11.00	11.10
177	9.30	9.40	195	11.10	11.20
178	9.40	9.50	196	11.20	11.30
179	9.50	9.60	197	11.30	11.40
180	9.60	9.70	198	11.40	11.50
181	9.70	9.80	199	11.50	11.60
182	9.80	9.90	200	11.60	11.70
183	9.90	10.00	201	11.70	11.80
184	10.00	10.10	202	11.80	11.90
185	10.10	10.20	203	11.90	12.00
186	10.20	10.30	204	12.00	12.10
187	10.30	10.40	205	12.10	12.20
188	10.40	10.50	206	12.20	12.30
189	10.50	10.60	207	12.30	12.40
190	10.60	10.70	208	12.40	12.50
191	10.70	10.80	209	12.50	12.60
192	10.80	10.90			

Then the spectrum was converted to suit the energy structure of the ORIGEN2 photon library. In the preparation of the original photon library, the intensity of each energy group was adjusted to conserve energy <sup>7)</sup>. The spectra in the JENDL/FPD-00 file, on the other hand, were prepared in order to keep the consistency between the spectra and the average decay energy per decay. Therefore, the adjustment employed in the original photon library was considered not to be needed. Thus the conversion was carried out as follows:

$$I_o^i = \sum_{k \subseteq i} I_j^k \cdot f_k \quad (2.1)$$

where

$I_o^i$  = Intensity of photons in the ORIGEN2 energy group  $i$ ,

$I_j^k$  = Intensity of photons of the JENDL/FPD-00 file in the SPEC5 energy group  $k$ ,

$f_k$  = Fraction of photon intensity in the SPEC5 energy group  $k$  included in the ORIGEN2 energy group  $i$ .

The fraction  $f_k$  was the ratio of the fractional energy width of the SPEC5 energy group  $k$  included in the ORIGEN2 energy group  $i$  to the total energy width of the SPEC5 energy group  $k$ . In this manner, the spectra of all of the 1053 FP nuclides in JENDL FP Decay Data File 2000 were prepared in the format of the ORIGEN2 photon library. In the prepared photon library the photon data of only the nuclides

**Table 2.2** Photon energy group structure of ORIGEN2 code

Group	Group energy (MeV)	
	Lower energy	Upper energy
1	0.0	2.0E-02
2	2.0E-02	3.0E-02
3	3.0E-02	4.5E-02
4	4.5E-02	7.0E-02
5	7.0E-02	1.0E-01
6	1.0E-01	1.5E-01
7	1.5E-01	3.0E-01
8	3.0E-01	4.5E-01
9	4.5E-01	7.0E-01
10	7.0E-01	1.0E+00
11	1.0E+00	1.5E+00
12	1.5E+00	2.0E+00
13	2.0E+00	2.5E+00
14	2.5E+00	3.0E+00
15	3.0E+00	4.0E+00
16	4.0E+00	6.0E+00
17	6.0E+00	8.0E+00
18	8.0E+00	1.1E+01

which were included in the decay data library of the ORIGEN2 code were selected and put into the photon library. The photon spectrum data of 695 FP nuclides were finally put into the photon library. The photon data of 455 nuclides were newly added into the photon library. In Appendix A the data of the photon library updated at the present work are listed.

As the number of nuclides is increased from 240 in the original library to 695 in the updated photon library, the number of no-zero photon yields in the ORIGEN2 code, LLL, has to be also increased. For the original library, the maximum number of LLL is assigned to be 8000. However, it is needed to be 12000 when using the updated photon library.

Thus created photon library has no bremsstrahlung. There are two kinds of photon libraries including bremsstrahlung available for the ORIGEN2 calculation. One is the bremsstrahlung of H<sub>2</sub>O, the other one the bremsstrahlung of UO<sub>2</sub>. Comparing the intensities in the bremsstrahlung libraries with those in the no bremsstrahlung library, the net intensities of the bremsstrahlung photons were extracted. Two new libraries including the bremsstrahlung were produced by adding the net intensities of the bremsstrahlung to the intensities in the photon library with no bremsstrahlung.

## 2.2 Decay Data Library

The decay data of the ORIGEN2 code were replaced with those of JENDL Decay Data File 2000. The format of the decay data library is following <sup>2)</sup>:

- First card of each library segment:  
NLB TITLE
- First card for each nuclide:  
NLB NUCLID IU THALF FBX FPEC FPECX FA FIT
- Subsequent card(s) for each nuclide:  
NLB FSF FN QREC ABUND ARCG WRCG
- Last card of each library segment:  
-1

where

- NLB = the number of this photon library segment,
- TITLE = a 72-character alphanumeric decay data library segment title beginning in Column 9,
- NUCLID = a six-digit nuclide identifier for the decay information on the following card(s),
- IU = time unit designation of the half-life of NUCLID,  
 1: seconds,  
 2: minutes,  
 3: hours,  
 4: days,  
 5: years,  
 6: stable,  
 7:  $10^3$  years (KY),  
 8:  $10^6$  years (MY),  
 9:  $10^9$  years (GY),
- THALF = the half-life of nuclide in the unit given by IU,
- FBX = the fraction of negatron beta decay transitions that results in the daughter nuclide being in a relatively long-lived excited state,
- FPEC = the fraction of all decay events which take place by positron emission or electron capture,
- FPECX = the fraction of positron and/or electron capture decay events that cause the daughter nuclide to be in a relatively long-lived excited state,

- FA = the fraction of all decay events which take place by alpha decay,
- FIT = the fraction of all the decay events of an excited nuclear state which result in the production of the ground state of the same nuclide,
- FSF = the fraction of all decay events which take place by spontaneous fission,
- FN = the fraction of all decay events that are (beta + neutron) decay,
- QREC = the average, total recoverable energy (i.e. does not include neutrino) released by all decay events, in MeV,
- ABUND = the naturally occurring isotopic abundance of NUCLID in atom percent,
- ARCG = the radioactivity concentration guide (RCG) for continuous inhalation of nuclide NUCLID in unrestricted areas as given in Table II, Column I, of Part 10 of Title 20 of the Code of Federal Regulations (the lower of the soluble or insoluble values is used)<sup>8)</sup>,
- WRCG = the radioactivity concentration guide (RCG) for continuous inhalation of nuclide NUCLID in unrestricted areas as given in Table II, Column II, of Part 10 of Title 20 of the Code of Federal Regulations (the lower of the soluble or insoluble values is used).

Then the fraction of all decay events which take place by negatron beta decay to the ground state of the daughter nuclide is given by  $(1.0 - \text{FBX} - \text{FPEC} - \text{FA} - \text{FIT} - \text{FSF} - \text{FN})$  and is calculated internally in ORIGEN2. The data shown in the above format excepting ABUND, ARCG and WRCG were replaced by those of the JENDL file.

In this replacement, the following problem was encountered. The nuclides in the ORIGEN2 decay library do not always coincide with the nuclides in the JENDL file even if the decay chain region is limited to that of the ORIGEN2 decay library. Some nuclides in the ORIGEN2 decay library are not included in the JENDL file because of different treatment of unstable nuclides. In Table 2.3 the nuclides not included in JENDL Decay Data File 2000 are listed. Of these nuclides 6 nuclides from  $^3\text{H}$  to  $^{14}\text{C}$  are light nuclides produced from ternary fission. Of the other 9 nuclides,  $^{71m}\text{Ge}$  and  $^{145}\text{Sm}$  nuclides are in the neutron deficient region and has small fission yield. The  $^{155m}\text{Gd}$  nuclide has no parent nuclide and has also small fission yield. These facts exclude these nuclides in the JENDL file. The other 6 nuclides are all metastable nuclides as seen in Table 2.3. These metastable nuclides, however, are not adopted in the recently compiled ENSDF file or Table of Isotopes 8th edition<sup>13)</sup>. This fact seems to mean that these nuclides were considered as metastable nuclides when the ORIGEN2 decay library was compiled, but later experiments showed that these states were not metastable. Then the chain passes to these metastable states are deleted in the updated decay data library even if the data of these states are kept in the library. The reason why the number of the nuclides in the decay data library has been kept is that FP nuclides are related to the fission yields data. Changing the number of nuclides requires the change of the fission yields data, but such update is not the purpose of the present work.

**Table 2.3** Nuclides not included in the JENDL Decay Data File 2000

Nuclide	Half-life (s)	ENSDF
$^3\text{H}$	$3.897 \times 10^8$	Adopted
$^6\text{Li}$	stable	Adopted
$^7\text{Li}$	stable	Adopted
$^9\text{Be}$	stable	Adopted
$^{10}\text{Be}$	$5.049 \times 10^{13}$	Adopted
$^{14}\text{C}$	$1.808 \times 10^{11}$	Adopted
$^{71m}\text{Ge}$	$2.190 \times 10^{-2}$	Adopted
$^{85m}\text{Se}$	$1.900 \times 10$	Not adopted
$^{86m}\text{Br}$	4.5000	Not adopted
$^{109m}\text{Rh}$	$5.000 \times 10$	Not adopted
$^{145}\text{Sm}$	$2.938 \times 10^7$	Not adopted
$^{155m}\text{Gd}$	$3.100 \times 10^{-2}$	Not adopted
$^{162m}\text{Tb}$	$8.028 \times 10^3$	Not adopted
$^{163m}\text{Tb}$	7.000	Not adopted
$^{170m}\text{Tm}$	$4.100 \times 10^{-6}$	Not adopted

There are also some isomers which are included in the JENDL/FPD-00 file but not in the ORIGEN2 decay data library in the covered mass region by the ORIGEN2 decay data library. The decay chains passing these isomers were also deleted in the update ORIGEN2 library. These isomers are listed in Table 2.4. After these change of the decay pass the update decay library has been produced.

**Table 2.4** Isomers not included in the ORIGEN2 decay data library

$^{74m}\text{Ga}$ , $^{79m}\text{Ge}$ , $^{84m}\text{As}$ , $^{93m}\text{Y}$ , $^{96m}\text{Y}$ , $^{97m}\text{Y}$ , $^{98m}\text{Y}$ , $^{100m}\text{Y}$ , $^{102m}\text{Nb}$ , $^{104m}\text{Nb}$ , $^{109m}\text{Ru}$ , $^{116n}\text{In}$ , $^{118n}\text{In}$ , $^{120m}\text{Ag}$ , $^{121m}\text{Cd}$ , $^{124m}\text{In}$ , $^{124n}\text{Sb}$ , $^{126m}\text{In}$ , $^{128m}\text{In}$ , $^{129m}\text{In}$ , $^{129m}\text{Sb}$ , $^{130m}\text{Sn}$ , $^{131m}\text{In}$ , $^{131n}\text{In}$ , $^{131m}\text{Sn}$ , $^{132m}\text{I}$ , $^{136m}\text{Cs}$ , $^{143m}\text{Xe}$ , $^{146m}\text{La}$ , $^{148m}\text{Pr}$ , $^{152n}\text{Pm}$ , $^{152n}\text{Eu}$ , $^{154m}\text{Eu}$
--



### 3 Test Calculation with Updated Libraries

The update photon and decay libraries were used to calculate the aggregate photon spectra and fission products decay heat values after fissions of some fissionable nuclides.

#### 3.1 Aggregate FP Photon Spectrum after Fission

The aggregate fission product gamma-ray spectra were calculated using the updated photon library and the updated decay library and the calculated results were compared with the measured spectra. An example of the spectrum comparison is shown in Fig. 3.1. The measured spectrum was obtained at

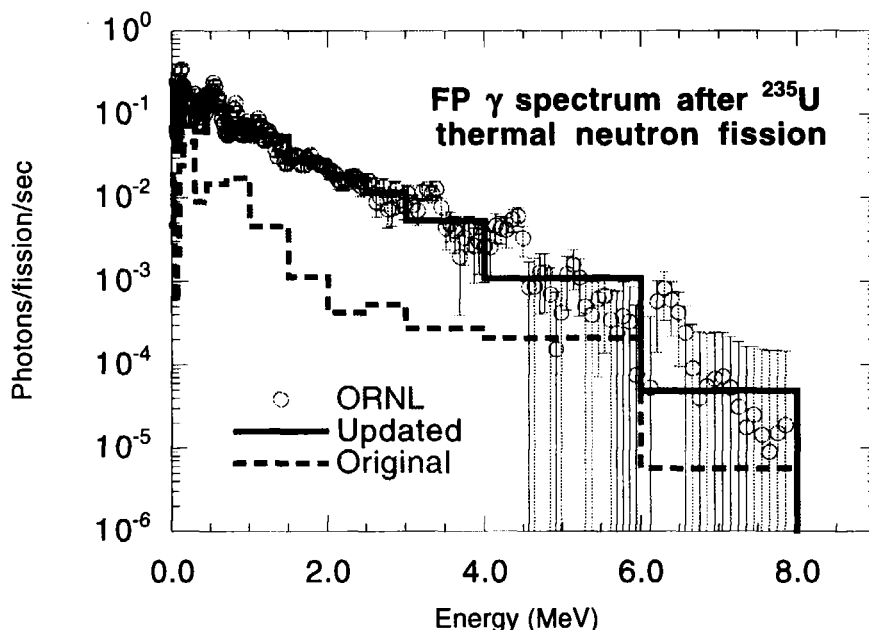


Fig. 3.1 Aggregate FP gamma-ray spectrum after  $^{235}\text{U}$  thermal neutron fission

ORNL <sup>9)</sup>. Sample of  $^{235}\text{U}$  was irradiated for 1 s and the measurement was started at 1.7 s after the end of the irradiation. The measurement time was 1.0 s. In this time region FP nuclides with no measured spectra contribute significantly to the aggregate spectrum. In the figure the ORIGEN2 calculations using the updated library and the original library are shown. As seen in this figure, the calculation using the updated library shows good agreement with the measurement although the calculation using the original library significantly underestimates the measurement. The updated library well compensates the deficiency in the original library.

As another example, photon intensity was calculated and compared with the reference calculation using the JENDL/FPD-00 file. The reference calculation was performed using the program developed

by Oyamatsu <sup>10)</sup>. The reliability of the combination of the program and the JENDL/FPD-00 file was examined comparing with the exposure rate of FP nuclides at short cooling times after fission burst <sup>11)</sup>. The photon intensities comparing with the reference calculation are shown in Fig. 3.2 for  $^{235}\text{U}$  thermal neutron fission. Although the calculation using the original libraries shows large discrepancies at

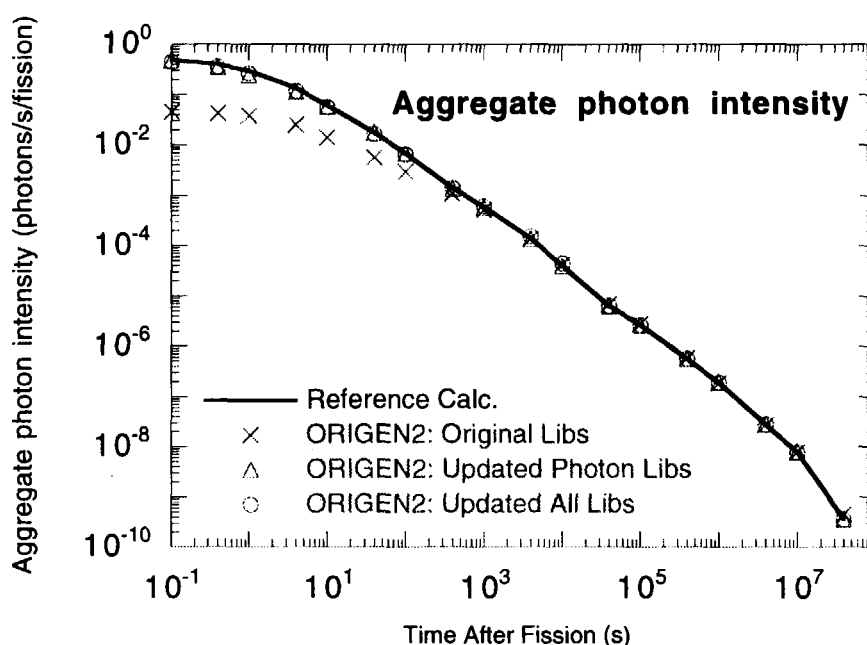


Fig. 3.2 Aggregate FP photon intensity after  $^{235}\text{U}$  thermal neutron fission

short cooling times, the calculation using the updated library shows good agreement with the reference calculation. The calculation shown as “Updated All Libs” in Fig. 3.2 was performed using the update photon library, decay library and fission yield data converted from the JNDC-V2 <sup>12)</sup> file. This fission yield data were prepared when the ORIGEN2 cross section data based on JENDL-3.2 were produced <sup>14)</sup>. The underestimation of the original library, however, is diminished after  $10^3$  s of cooling times and the difference is not clear at this time region. The updated library then affects the intensity at shorter cooling times than  $10^3$  s.

### 3.2 FP Decay Heat

Calculation of fission products decay heat was also carried out using the updated decay library. The calculated results were compared with the recommendation of Atomic Energy Society of Japan (hereafter AESJ recommendation) <sup>15)</sup>. An example is shown in Fig. 3.3. This figure shows the ratios of the calculated decay heat values to the AESJ recommendation for  $^{235}\text{U}$  burst fission. The calculation using the original ORIGEN2 decay data library is also shown in this figure. The ratios of the calculated

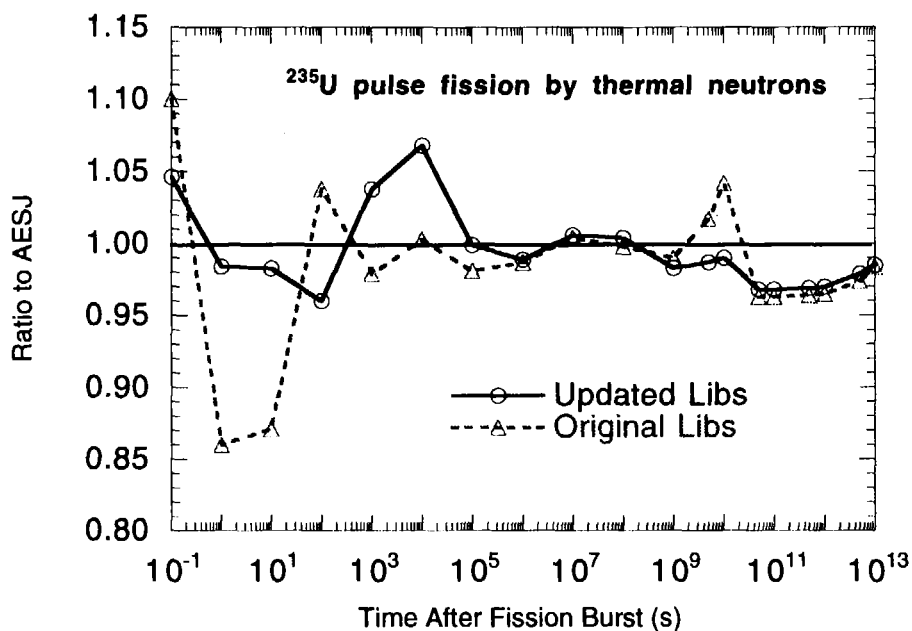


Fig. 3.3 Ratio of decay heat values to those of the AESJ recommendation

decay heat using the updated library to the AESJ recommendation stay within 5 %. The calculation using the original library shows about 15 % deviation between 1 to 10 s. One should notice that the difference seen in Fig. 3.3 is not so large comparing with the deficiency seen in Fig. 3.1 where aggregate FP spectrum is compared. This is because the ORIGEN2 decay data library adopted the ENDF/B-IV<sup>5)</sup> data for short-lived nuclides that had not observed experimentally<sup>7)</sup>. For such short-lived nuclides, theoretically estimated decay energy values were adopted in the ENDF/B-IV file. In the JENDL/FPD-00 file which is a basis of the present updated libraries, theoretically estimated decay energy values are also adopted for some short-lived nuclides. The adoption of the theoretically estimated decay energy values in both files makes the differences seen in the decay heat calculation relatively small.

## 4 Summary

The photon and decay data libraries for the ORIGEN2 code have been updated using JENDL FP Decay Data File 2000. The number of the nuclides having photon data has been increased. The photon data of more than 400 nuclides were newly added in the updated photon library. The calculations of the photon spectrum and the intensity at short cooling times after fission have been improved by using the updated libraries.

In order to use the updated photon library in the ORIGEN2 calculation, the number of non-zero photon yields in the ORIGEN2 code, LLL, should be increased up to at least 12000 because the number of nuclides with photon spectrum is increased from 240 to 695 as described in Chapter 2.1.

## Acknowledgements

The author wishes to acknowledge the support of the members of Decay Heat Working Group and Nuclide Production Evaluation Working Group, Japanese Nuclear Data Committee, in the compilation of the photon and decay data libraries for the ORIGEN2 code based on JENDL FP Decay Data File 2000. The authors also thank Mr. Kiyosumi, The Japan Research Institute, Limited, for his assistance to prepare the updated photon library.

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## Appendix A: Photon Library

The updated ORIGEN2 photon library of FP nuclides with no bremsstrahlung is listed here.

UPDATED PHOTON LIBRARY: FISSION PRODUCTS (06/02 J. KATAKURA)									
103		10	1.63E-03	11	7.40E-02	-1			
103	290660	1	6.61E-02	5	2.31E-01	7	4.88E-01	8	1.02E-02 -1
103	300690	8	1.20E-05	-1					
103	300691	1	2.20E-02	8	9.48E-01	-1			
103	310700	1	1.89E-03	7	2.90E-03	11	6.50E-03	-1	
103	300710	1	7.55E-04	6	2.98E-02	8	4.49E-02	9	3.33E-01 10 9.15E-02
		11	2.50E-02	12	5.79E-03	13	7.04E-04	-1	
103	300711	1	1.81E-03	5	6.23E-04	6	8.46E-02	8	9.56E-01 9 1.77E+00
		10	1.21E-01	11	6.53E-02	12	1.14E-02	13	7.35E-04 -1
103	320710	1	4.53E-01	-1					
103	270720	1	4.34E-04	2	2.17E-04	3	3.25E-04	4	5.42E-04 5 6.51E-04
		6	2.25E-03	7	9.27E-03	8	1.60E-02	9	4.06E-02 10 7.20E-02
		11	1.35E-01	12	1.35E-01	13	1.40E-01	14	1.41E-01 15 2.55E-01
		16	3.19E-01	17	1.11E-01	18	3.06E-02	-1	
103	280720	1	2.79E-04	2	1.40E-04	3	2.10E-04	4	3.49E-04 5 4.19E-04
		6	1.45E-03	7	5.97E-03	8	1.03E-02	9	2.61E-02 10 4.64E-02
		11	8.51E-02	12	7.28E-02	13	6.17E-02	14	5.08E-02 15 6.77E-02
		16	2.48E-02	-1					
103	290720	1	4.86E-04	2	2.43E-04	3	3.64E-04	4	6.07E-04 5 7.28E-04
		6	2.52E-03	7	1.04E-02	8	1.80E-02	9	7.40E-01 10 2.00E-01
		11	3.59E-01	12	3.55E-01	13	2.20E-01	14	8.66E-02 15 1.71E-01
		16	3.86E-06	17	9.74E-07	-1			
103	300720	1	5.70E-01	3	7.05E-03	4	7.05E-03	5	3.90E-02 6 8.73E-01
		7	9.37E-02	-1					
103	310720	1	2.83E-03	4	1.00E-04	6	1.52E-03	7	2.14E-03 8 7.47E-03
		9	3.06E-01	10	1.15E+00	11	1.57E-01	12	1.27E-01 13 3.50E-01
		14	1.38E-01	15	3.05E-04	-1			
103	270730	1	3.16E-04	2	1.58E-04	3	2.37E-04	4	3.95E-04 5 4.73E-04
		6	1.64E-03	7	6.75E-03	8	1.17E-02	9	2.95E-02 10 5.24E-02
		11	9.76E-02	12	9.46E-02	13	9.51E-02	14	9.43E-02 15 1.68E-01
		16	1.98E-01	17	6.49E-02	18	1.73E-02	-1	
103	280730	1	2.58E-04	2	1.29E-04	3	1.94E-04	4	3.23E-04 5 3.87E-04
		6	1.34E-03	7	5.52E-03	8	9.55E-03	9	2.42E-02 10 4.29E-02
		11	7.95E-02	12	7.46E-02	13	7.20E-02	14	6.82E-02 15 1.06E-01
		16	9.76E-02	17	2.14E-02	18	8.36E-04	-1	
103	290730	1	1.94E-04	2	9.72E-05	3	1.46E-04	4	2.43E-04 5 2.92E-04
		6	1.01E-03	7	4.16E-03	8	7.19E-03	9	1.82E-02 10 3.23E-02
		11	5.92E-02	12	5.14E-02	13	4.75E-02	14	4.63E-02 15 6.73E-02
		16	2.30E-02	-1					
103	300730	1	5.63E-04	2	1.57E-04	3	2.35E-04	4	3.92E-04 5 4.71E-04
		6	1.63E-03	7	3.38E-02	8	1.21E-02	9	3.76E-02 10 6.06E-02
		11	1.01E-01	12	9.64E-02	13	9.30E-02	14	8.05E-02 15 8.45E-02
		16	1.61E-02	-1					
103	310730	1	4.35E-04	4	3.99E-03	7	8.02E-01	8	1.19E-01 9 1.14E-02
		10	5.81E-02	11	1.28E-02	-1			
103	320731	1	5.69E-01	4	1.03E-01	-1			
103	270740	1	4.34E-04	2	2.17E-04	3	3.26E-04	4	5.43E-04 5 6.51E-04
		6	2.25E-03	7	9.28E-03	8	1.60E-02	9	4.06E-02 10 7.21E-02
		11	1.35E-01	12	1.35E-01	13	1.41E-01	14	1.44E-01 15 2.69E-01
		16	3.64E-01	17	1.46E-01	18	4.79E-02	-1	
103	280740	1	2.56E-04	2	1.28E-04	3	1.92E-04	4	3.20E-04 5 3.84E-04
		6	1.33E-03	7	5.48E-03	8	9.48E-03	9	2.40E-02 10 4.26E-02

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		11 7.85E-02	12 7.02E-02	13 6.25E-02	14 5.39E-02	15 7.98E-02
		16 6.74E-02	17 5.96E-03	-1		
103	290740	1 4.77E-04	2 2.38E-04	3 3.58E-04	4 5.96E-04	5 7.15E-04
		6 2.47E-03	7 1.02E-02	8 1.76E-02	9 4.46E-02	10 7.92E-02
		11 1.47E-01	12 1.42E-01	13 1.38E-01	14 1.30E-01	15 2.04E-01
		16 2.01E-01	17 4.70E-02	18 1.80E-03	-1	
103	300740	1 7.81E-04	2 3.90E-04	3 5.85E-04	4 9.76E-04	5 1.17E-03
		6 4.05E-03	7 1.67E-02	8 2.89E-02	9 7.31E-02	10 1.30E-01
		11 2.37E-01	12 1.69E-01	13 4.48E-02	-1	
103	310740	7 2.66E-03	8 2.57E-03	9 1.18E+00	10 1.52E-01	11 2.72E-01
		12 1.55E-01	13 5.50E-01	14 6.59E-02	15 3.68E-02	-1
103	270750	1 3.29E-04	2 1.64E-04	3 2.47E-04	4 4.11E-04	5 4.93E-04
		6 1.71E-03	7 7.03E-03	8 1.22E-02	9 3.08E-02	10 5.46E-02
		11 1.02E-01	12 9.78E-02	13 9.86E-02	14 9.91E-02	15 1.84E-01
		16 2.45E-01	17 9.99E-02	18 3.46E-02	-1	
103	280750	1 2.92E-04	2 1.46E-04	3 2.19E-04	4 3.65E-04	5 4.37E-04
		6 1.51E-03	7 6.23E-03	8 1.08E-02	9 2.73E-02	10 4.84E-02
		11 9.00E-02	12 8.59E-02	13 8.49E-02	14 8.20E-02	15 1.35E-01
		16 1.41E-01	17 3.91E-02	18 6.94E-03	-1	
103	290750	1 2.15E-04	2 1.08E-04	3 1.61E-04	4 2.69E-04	5 3.23E-04
		6 1.12E-03	7 4.60E-03	8 7.96E-03	9 2.01E-02	10 3.57E-02
		11 6.61E-02	12 6.02E-02	13 5.61E-02	14 5.21E-02	15 7.79E-02
		16 6.08E-02	17 4.58E-03	-1		
103	300750	2 4.34E-03	7 5.36E-01	8 3.91E-01	9 2.34E-01	10 2.03E-01
		11 1.85E-01	12 2.05E-01	13 2.31E-01	14 3.99E-02	-1
103	310750	1 1.41E-04	2 7.03E-05	3 1.06E-04	4 1.76E-04	5 2.11E-04
		6 7.30E-04	7 3.01E-03	8 5.20E-03	9 1.32E-02	10 2.34E-02
		11 4.29E-02	12 3.99E-02	13 4.30E-02	14 3.60E-02	15 7.68E-03
		-1				
103	320750	4 1.14E-03	7 1.26E-01	8 2.10E-03	9 3.37E-03	-1
103	320751	1 2.68E-01	4 1.16E-04	5 3.10E-05	6 3.88E-01	-1
103	280760	1 2.48E-04	2 1.24E-04	3 1.86E-04	4 3.10E-04	5 3.72E-04
		6 1.29E-03	7 5.30E-03	8 9.17E-03	9 2.32E-02	10 4.12E-02
		11 7.61E-02	12 6.92E-02	13 6.41E-02	14 5.82E-02	15 9.35E-02
		16 9.49E-02	17 2.40E-02	18 1.29E-03	-1	
103	290760	1 8.34E-04	2 4.17E-04	3 6.26E-04	4 1.04E-03	5 1.25E-03
		6 4.33E-03	7 1.78E-02	8 3.08E-02	9 7.81E-02	10 1.39E-01
		11 2.58E-01	12 2.36E-01	13 1.85E-01	14 1.55E-01	15 2.22E-01
		16 1.80E-01	17 1.94E-02	18 1.02E-07	-1	
103	300760	1 1.75E-04	2 8.76E-05	3 1.31E-04	4 2.19E-04	5 2.24E-01
		6 1.49E-02	7 7.42E-01	8 7.59E-02	9 4.03E-02	10 1.13E-01
		11 1.10E-01	12 6.07E-02	13 3.93E-02	14 2.02E-02	15 1.60E-02
		-1				
103	310760	8 1.45E-01	9 9.27E-01	10 1.25E-01	11 2.44E-01	12 1.45E-01
		13 1.57E-01	14 2.18E-01	15 1.74E-01	16 4.75E-03	-1
103	330760	8 4.72E-04	9 5.31E-01	10 5.28E-03	11 6.61E-02	12 3.98E-03
		13 9.10E-03	14 4.39E-04	-1		
103	280770	1 3.17E-04	2 1.59E-04	3 2.38E-04	4 3.97E-04	5 4.76E-04
		6 1.65E-03	7 6.78E-03	8 1.17E-02	9 2.97E-02	10 5.27E-02
		11 9.77E-02	12 9.26E-02	13 9.24E-02	14 9.16E-02	15 1.63E-01
		16 2.04E-01	17 7.36E-02	18 2.25E-02	-1	
103	290770	1 2.37E-04	2 1.18E-04	3 1.77E-04	4 2.96E-04	5 3.55E-04
		6 1.23E-03	7 5.06E-03	8 8.75E-03	9 2.21E-02	10 3.93E-02
		11 7.28E-02	12 6.76E-02	13 6.47E-02	14 6.13E-02	15 9.78E-02
		16 9.30E-02	17 2.11E-02	18 6.32E-04	-1	
103	300770	4 1.97E-02	6 7.87E-02	7 4.74E-01	8 2.43E-01	9 5.15E-01
		10 3.89E-01	11 2.81E-01	12 3.10E-01	13 2.53E-02	14 1.66E-02
		15 4.07E-02	-1			
103	310770	1 2.41E-04	2 1.21E-04	3 1.81E-04	4 3.02E-04	5 3.62E-04

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		6	1.25E-03	7	5.16E-03	8	8.93E-03	9	2.26E-02	10	4.01E-02
		11	7.26E-02	12	5.60E-02	13	4.85E-02	14	4.37E-02	15	6.76E-02
		16	2.01E-02	-1							
103	320770	7	1.18E+00	8	3.84E-01	9	3.06E-01	10	2.27E-01	11	1.73E-01
		12	2.28E-02	13	1.93E-02	-1					
103	320771	1	4.41E-02	7	3.32E-01	8	9.70E-04	9	4.50E-04	-1	
103	330770	5	2.02E-03	6	1.11E-04	7	2.05E-02	8	1.02E-05	9	5.58E-03
		-1									
103	340771	1	2.36E-01	7	5.25E-01	-1					
103	280780	1	2.39E-04	2	1.19E-04	3	1.79E-04	4	2.98E-04	5	3.58E-04
		6	1.24E-03	7	5.10E-03	8	8.83E-03	9	2.23E-02	10	3.96E-02
		11	7.31E-02	12	6.59E-02	13	6.15E-02	14	5.77E-02	15	9.98E-02
		16	1.22E-01	17	4.37E-02	18	9.99E-03	-1			
103	290780	1	4.17E-04	2	2.08E-04	3	3.13E-04	4	5.21E-04	5	6.25E-04
		6	2.16E-03	7	8.91E-03	8	1.54E-02	9	3.90E-02	10	6.92E-02
		11	1.29E-01	12	1.25E-01	13	1.26E-01	14	1.25E-01	15	2.21E-01
		16	2.71E-01	17	9.34E-02	18	2.54E-02	-1			
103	300780	4	2.59E-02	5	5.93E-03	6	9.70E-02	7	9.89E-01	8	2.61E-01
		9	4.16E-01	10	4.85E-01	11	1.71E-01	12	4.52E-02	13	7.55E-02
		14	2.99E-02	15	1.32E-02	-1					
103	310780	8	5.24E-02	9	1.08E+00	10	1.05E-01	11	5.36E-01	12	2.16E-01
		13	1.17E-01	14	7.85E-02	15	6.64E-02	16	1.31E-02	-1	
103	320780	7	1.00E+00	-1							
103	330780	7	2.72E-03	8	2.26E-02	9	7.72E-01	10	1.31E-01	11	3.00E-01
		12	1.05E-01	13	2.20E-02	14	3.10E-02	15	6.50E-04	-1	
103	290790	1	3.19E-04	2	1.60E-04	3	2.39E-04	4	3.99E-04	5	4.79E-04
		6	1.66E-03	7	6.82E-03	8	1.18E-02	9	2.99E-02	10	5.30E-02
		11	9.76E-02	12	8.69E-02	13	7.91E-02	14	7.14E-02	15	1.16E-01
		16	1.25E-01	17	3.50E-02	18	1.84E-03	-1			
103	300790	1	2.07E-04	2	1.03E-04	3	1.55E-04	4	2.59E-04	5	3.10E-04
		6	1.07E-03	7	2.40E-01	8	9.06E-02	9	1.45E-01	10	1.30E+00
		11	2.92E-01	12	2.10E-01	13	1.23E-01	14	7.13E-02	15	9.07E-02
		16	3.44E-02	17	1.02E-04	18	1.97E-07	-1			
103	310790	1	9.95E-03	5	3.19E-02	6	4.33E-02	7	1.08E-02	8	3.22E-02
		9	5.18E-01	10	6.90E-02	11	3.12E-01	12	1.86E-01	13	1.86E-01
		14	1.03E-01	15	9.67E-02	16	1.45E-03	-1			
103	320790	1	1.55E-02	2	1.88E-05	3	2.81E-05	4	4.69E-05	5	5.63E-05
		6	2.26E-01	7	1.79E-02	8	4.76E-03	9	3.84E-02	10	2.74E-02
		11	5.69E-02	12	1.13E-01	13	1.02E-02	14	1.19E-02	15	8.44E-03
		16	1.02E-04	-1							
103	330790	8	3.71E-02	9	4.92E-03	10	1.94E-02	-1			
103	340791	1	4.29E-01	5	9.61E-02	-1					
103	350791	1	1.29E-01	7	7.64E-01	-1					
103	290800	1	3.77E-04	2	1.88E-04	3	2.83E-04	4	4.71E-04	5	5.65E-04
		6	1.96E-03	7	8.06E-03	8	1.39E-02	9	3.53E-02	10	6.26E-02
		11	1.16E-01	12	1.06E-01	13	1.04E-01	14	1.04E-01	15	1.95E-01
		16	2.90E-01	17	1.37E-01	18	5.75E-02	-1			
103	300800	5	7.17E-02	6	2.71E-03	7	1.16E-01	8	1.11E-01	9	5.09E-01
		10	1.23E+00	11	2.53E-01	12	5.32E-02	-1			
103	310800	1	3.09E-04	2	1.55E-04	3	2.32E-04	4	3.87E-04	5	4.64E-04
		6	1.61E-03	7	6.61E-03	8	1.53E-02	9	1.03E+00	10	1.57E-01
		11	9.96E-01	12	2.16E-01	13	1.49E-01	14	1.36E-01	15	1.04E-01
		16	3.89E-02	17	3.73E-06	18	5.21E-07	-1			
103	320800	1	2.62E-04	2	1.31E-04	3	1.96E-04	4	3.27E-04	5	3.92E-04
		6	4.83E-02	7	2.01E-01	8	3.48E-02	9	4.93E-02	10	7.87E-02
		11	1.42E-01	12	9.80E-02	13	4.60E-02	14	3.47E-03	-1	
103	330800	9	4.20E-01	10	2.02E-02	11	6.64E-02	12	9.11E-02	13	9.66E-03
		14	7.98E-03	15	1.26E-03	-1					
103	350800	1	3.34E-02	9	1.25E-01	10	2.37E-03	11	7.40E-04	-1	



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103	350801	1	7.93E-01	3	3.93E-01	4	1.59E-03	-1		
103	290810	1	3.12E-04	2	1.56E-04	3	2.34E-04	4	3.90E-04	5 4.68E-04
		6	1.62E-03	7	6.67E-03	8	1.15E-02	9	2.92E-02	10 5.18E-02
		11	9.56E-02	12	8.80E-02	13	8.61E-02	14	8.55E-02	15 1.57E-01
		16	2.19E-01	17	9.71E-02	18	3.87E-02	-1		
103	300810	1	3.00E-04	2	1.50E-04	3	2.25E-04	4	3.75E-04	5 4.50E-04
		6	1.56E-03	7	6.41E-03	8	1.11E-02	9	2.81E-02	10 4.98E-02
		11	9.18E-02	12	8.42E-02	13	8.25E-02	14	8.12E-02	15 1.40E-01
		16	1.75E-01	17	6.64E-02	18	2.08E-02	-1		
103	310810	1	1.27E-03	7	3.79E-01	8	1.65E-03	9	1.19E-01	10 5.50E-01
		11	2.68E-01	12	1.92E-01	13	1.91E-01	14	6.79E-02	15 7.37E-02
		16	2.90E-02	-1						
103	320810	1	1.38E-02	5	1.35E-01	6	4.40E-02	7	1.69E-01	8 6.55E-01
		9	2.38E-01	10	1.02E+00	11	8.03E-01	12	2.60E-01	13 3.55E-02
		14	7.38E-02	-1						
103	330810	1	1.39E-04	7	2.84E-03	8	8.60E-03	9	2.99E-01	10 1.44E-02
		11	9.98E-03	12	8.08E-03	13	1.13E-02	14	7.06E-03	15 3.60E-04
		-1								
103	340810	1	1.07E-04	7	1.24E-02	9	3.81E-03	10	2.84E-03	11 1.41E-05
		-1								
103	340811	1	4.12E-01	6	1.27E-01	-1				
103	360810	1	5.37E-01	7	2.97E-03	-1				
103	360811	1	1.78E-01	7	6.70E-01	-1				
103	300820	1	2.66E-04	2	1.33E-04	3	2.00E-04	4	3.33E-04	5 3.99E-04
		6	1.38E-03	7	5.69E-03	8	9.83E-03	9	2.49E-02	10 4.42E-02
		11	8.15E-02	12	7.40E-02	13	6.95E-02	14	6.53E-02	15 1.13E-01
		16	1.40E-01	17	5.12E-02	18	1.51E-02	-1		
103	310820	1	7.50E-04	2	3.75E-04	3	5.62E-04	4	9.37E-04	5 1.12E-03
		6	3.89E-03	7	1.60E-02	8	2.77E-02	9	7.02E-02	10 1.24E-01
		11	2.33E-01	12	1.98E-01	13	1.76E-01	14	1.57E-01	15 2.48E-01
		16	2.48E-01	17	6.26E-02	18	4.14E-03	-1		
103	320820	1	2.08E-04	2	1.04E-04	3	1.56E-04	4	2.60E-04	5 3.12E-04
		6	1.08E-03	7	4.45E-03	8	7.70E-03	9	1.95E-02	10 3.46E-02
		11	6.26E-02	12	4.94E-02	13	4.67E-02	14	4.94E-02	15 8.22E-02
		16	7.29E-03	-1						
103	330820	1	4.63E-04	2	2.32E-04	3	3.47E-04	4	5.79E-04	5 6.95E-04
		6	2.40E-03	7	9.90E-03	8	1.71E-02	9	1.04E-01	10 8.41E-02
		11	1.52E-01	12	1.39E-01	13	9.61E-02	14	8.06E-02	15 2.20E-02
		16	2.58E-06	17	3.71E-07	-1				
103	330821	8	5.76E-01	9	8.52E-01	10	3.73E-01	11	3.21E-01	12 7.76E-01
		-1								
103	350820	1	1.23E-03	5	7.18E-03	6	2.52E-03	7	3.08E-02	8 9.93E-04
		9	1.44E+00	10	1.08E+00	11	7.21E-01	12	9.20E-03	-1
103	350821	1	3.88E-01	3	1.19E-03	4	1.19E-03	9	3.60E-04	10 2.61E-03
		11	2.49E-04	12	1.66E-05	14	7.26E-07	-1		
103	300830	1	4.03E-04	2	2.02E-04	3	3.02E-04	4	5.04E-04	5 6.05E-04
		6	2.09E-03	7	8.62E-03	8	1.49E-02	9	3.77E-02	10 6.69E-02
		11	1.24E-01	12	1.17E-01	13	1.16E-01	14	1.15E-01	15 2.03E-01
		16	2.58E-01	17	9.74E-02	18	3.15E-02	-1		
103	310830	1	4.18E-04	2	2.09E-04	3	3.13E-04	4	5.22E-04	5 6.26E-04
		6	2.17E-03	7	8.93E-03	8	1.54E-02	9	3.91E-02	10 6.93E-02
		11	1.28E-01	12	1.20E-01	13	1.19E-01	14	1.17E-01	15 2.06E-01
		16	2.45E-01	17	8.33E-02	18	2.38E-02	-1		
103	320830	1	6.64E-04	2	3.32E-04	3	4.98E-04	4	8.30E-04	5 9.95E-04
		6	3.44E-03	7	1.42E-02	8	2.61E-01	9	6.98E-02	10 1.51E-01
		11	3.66E-01	12	2.22E-01	13	1.33E-01	14	1.25E-01	15 8.06E-02
		16	9.74E-02	17	1.98E-05	18	2.32E-07	-1		
103	330830	1	6.55E-04	2	3.28E-04	3	4.92E-04	4	8.19E-04	5 9.83E-04
		6	3.40E-03	7	1.40E-02	8	2.42E-02	9	6.13E-02	10 1.09E-01

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		11 2.00E-01	12 1.72E-01	13 1.54E-01	14 1.44E-01	15 2.45E-01
		16 1.05E-01	-1			
103	340830	7 3.51E-01	8 7.54E-01	9 6.79E-01	10 7.23E-01	11 4.48E-01
		12 2.22E-01	13 1.54E-01	-1		
103	340831	7 5.06E-03	8 1.78E-01	9 1.60E-01	10 1.92E-01	11 3.01E-01
		12 4.36E-02	13 1.14E-01	14 9.63E-04	15 4.38E-04	-1
103	350830	6 1.32E-05	9 1.28E-02	10 6.00E-08	-1	
103	360831	1 2.46E-01	3 5.49E-04	-1		
103	310840	1 4.43E-04	2 2.22E-04	3 3.32E-04	4 5.54E-04	5 6.65E-04
		6 2.30E-03	7 9.47E-03	8 1.64E-02	9 4.15E-02	10 7.36E-02
		11 1.37E-01	12 1.34E-01	13 1.36E-01	14 1.35E-01	15 2.44E-01
		16 3.12E-01	17 1.12E-01	18 3.27E-02	-1	
103	320840	1 4.66E-04	2 2.33E-04	3 3.49E-04	4 5.82E-04	5 6.99E-04
		6 2.42E-03	7 9.96E-03	8 1.72E-02	9 4.36E-02	10 7.74E-02
		11 1.43E-01	12 1.27E-01	13 1.14E-01	14 1.00E-01	15 1.54E-01
		16 1.46E-01	17 2.90E-02	18 1.23E-07	-1	
103	330840	1 1.25E-04	2 6.26E-05	3 9.38E-05	4 1.56E-04	5 1.88E-04
		6 6.49E-04	7 2.67E-03	8 4.63E-03	9 2.54E-01	10 2.08E-02
		11 6.16E-01	12 7.90E-02	13 1.19E-01	14 3.26E-02	15 5.01E-02
		16 5.17E-02	17 1.18E-06	18 1.17E-07	-1	
103	340840	8 1.00E+00	9 2.40E-02	-1		
103	350840	7 2.94E-03	8 9.95E-03	9 1.94E-02	10 5.06E-01	11 1.18E-01
		12 1.90E-01	13 1.03E-01	14 2.25E-02	15 1.45E-01	16 2.98E-03
		-1				
103	350841	8 1.03E+00	10 9.80E-01	11 9.80E-01	12 2.00E-02	-1
103	310850	1 4.41E-04	2 2.20E-04	3 3.31E-04	4 5.51E-04	5 6.61E-04
		6 2.29E-03	7 9.42E-03	8 1.63E-02	9 4.12E-02	10 7.32E-02
		11 1.36E-01	12 1.33E-01	13 1.35E-01	14 1.34E-01	15 2.37E-01
		16 2.85E-01	17 9.69E-02	18 2.70E-02	-1	
103	320850	1 4.58E-04	2 2.29E-04	3 3.44E-04	4 5.73E-04	5 6.87E-04
		6 2.38E-03	7 9.79E-03	8 1.69E-02	9 4.29E-02	10 7.61E-02
		11 1.41E-01	12 1.33E-01	13 1.30E-01	14 1.25E-01	15 1.99E-01
		16 1.97E-01	17 5.06E-02	18 6.80E-03	-1	
103	330850	1 7.44E-04	2 3.72E-04	3 5.58E-04	4 9.29E-04	5 1.12E-03
		6 3.86E-03	7 1.59E-02	8 2.75E-02	9 6.96E-02	10 1.23E-01
		11 2.28E-01	12 2.22E-01	13 2.26E-01	14 1.76E-01	15 2.08E-01
		16 1.03E-01	17 8.14E-06	18 1.36E-06	-1	
103	340850	8 4.83E-01	9 4.14E-02	10 1.14E-01	11 1.97E-01	12 8.60E-02
		13 1.03E-01	14 7.96E-02	15 2.64E-01	-1	
103	350850	5 3.77E-04	6 3.91E-04	7 1.93E-03	8 1.06E-03	9 1.17E-03
		10 5.65E-02	11 4.72E-03	12 5.48E-03	13 3.47E-04	-1
103	360850	1 1.03E-05	9 4.34E-03	-1		
103	360851	1 6.24E-02	6 3.00E-03	7 7.50E-01	8 1.40E-01	9 1.12E-04
		10 7.50E-05	-1			
103	320860	1 4.20E-04	2 2.10E-04	3 3.15E-04	4 5.25E-04	5 6.31E-04
		6 2.18E-03	7 8.99E-03	8 1.55E-02	9 3.93E-02	10 6.98E-02
		11 1.29E-01	12 1.21E-01	13 1.13E-01	14 1.03E-01	15 1.64E-01
		16 1.59E-01	17 3.85E-02	18 5.19E-03	-1	
103	330860	1 4.63E-04	2 2.32E-04	3 3.47E-04	4 5.79E-04	5 6.95E-04
		6 2.40E-03	7 9.90E-03	8 1.71E-02	9 4.33E-02	10 7.69E-02
		11 1.43E-01	12 1.39E-01	13 1.39E-01	14 1.35E-01	15 2.26E-01
		16 2.48E-01	17 6.97E-02	18 1.34E-02	-1	
103	340860	1 9.98E-01	3 7.68E-02	4 7.68E-02	7 1.35E-01	8 9.42E-02
		9 3.01E-03	10 4.69E-02	11 1.20E-01	13 6.09E-01	14 2.16E-01
		-1				
103	350860	9 4.48E-03	10 7.30E-02	11 3.94E-01	12 8.16E-01	13 9.54E-02
		14 2.37E-01	16 7.42E-02	17 7.87E-03	-1	
103	370860	1 1.64E-05	11 8.64E-02	-1		
103	370861	1 1.07E-02	9 9.82E-01	-1		

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103	320870	1	4.89E-04	2	2.44E-04	3	3.67E-04	4	6.11E-04	5	7.33E-04
		6	2.54E-03	7	1.05E-02	8	1.81E-02	9	4.58E-02	10	8.12E-02
		11	1.52E-01	12	1.49E-01	13	1.50E-01	14	1.42E-01	15	2.28E-01
		16	2.23E-01	17	5.30E-02	18	9.36E-03	-1			
103	330870	1	4.81E-04	2	2.40E-04	3	3.61E-04	4	6.01E-04	5	7.21E-04
		6	2.49E-03	7	1.03E-02	8	1.78E-02	9	4.50E-02	10	7.98E-02
		11	1.49E-01	12	1.44E-01	13	1.43E-01	14	1.37E-01	15	2.20E-01
		16	2.15E-01	17	5.29E-02	18	9.32E-03	-1			
103	340870	1	8.61E-04	2	4.30E-04	3	6.46E-04	4	1.08E-03	5	1.29E-03
		6	4.47E-03	7	3.88E-01	8	3.78E-01	9	4.51E-01	10	2.57E-01
		11	4.34E-01	12	2.96E-01	13	1.49E-01	14	8.63E-02	15	9.09E-02
		16	4.18E-05	17	7.45E-06	-1					
103	350870	5	1.30E-03	6	3.60E-04	7	8.70E-03	8	3.56E-02	9	1.03E-01
		10	7.01E-02	11	4.33E-01	12	1.56E-01	13	1.72E-01	14	1.53E-01
		15	1.34E-01	16	2.26E-01	-1					
103	360870	1	1.23E-03	6	4.46E-04	8	4.96E-01	9	1.99E-02	10	8.53E-02
		11	2.22E-02	12	2.77E-02	13	3.20E-02	14	1.36E-01	15	5.31E-03
		-1									
103	380871	1	1.06E-01	8	8.19E-01	-1					
103	320880	1	4.32E-04	2	2.16E-04	3	3.24E-04	4	5.40E-04	5	6.48E-04
		6	2.24E-03	7	9.24E-03	8	1.60E-02	9	4.05E-02	10	7.18E-02
		11	1.34E-01	12	1.30E-01	13	1.26E-01	14	1.17E-01	15	1.89E-01
		16	1.84E-01	17	4.41E-02	18	7.92E-03	-1			
103	330880	1	5.14E-04	2	2.57E-04	3	3.86E-04	4	6.43E-04	5	7.71E-04
		6	2.67E-03	7	1.10E-02	8	1.90E-02	9	4.81E-02	10	8.54E-02
		11	1.60E-01	12	1.63E-01	13	1.67E-01	14	1.60E-01	15	2.65E-01
		16	2.73E-01	17	6.76E-02	18	1.25E-02	-1			
103	340880	1	1.07E-01	2	3.74E-04	3	5.60E-04	4	9.34E-04	5	1.12E-03
		6	1.29E-02	7	2.93E-01	8	6.27E-02	9	8.66E-02	10	1.24E-01
		11	2.55E-01	12	3.44E-01	13	1.19E-01	14	1.23E-01	15	7.21E-02
		16	9.80E-04	17	2.85E-06	-1					
103	350880	6	3.15E-04	7	2.27E-03	8	2.27E-03	9	2.48E-02	10	8.25E-01
		11	1.18E-01	12	1.32E-01	13	8.18E-02	14	1.14E-01	15	1.40E-01
		16	2.57E-01	17	4.41E-03	-1					
103	360880	1	8.39E-02	2	1.97E-02	6	1.97E-03	7	2.94E-01	8	3.30E-02
		9	1.38E-02	10	1.68E-01	11	7.81E-02	12	1.47E-01	13	6.06E-01
		14	8.13E-03	-1							
103	370880	1	1.55E-05	8	7.79E-04	9	2.78E-04	10	1.41E-01	11	9.07E-03
		12	2.17E-01	13	5.67E-03	14	2.25E-02	15	5.99E-03	16	1.63E-03
		-1									
103	330890	1	5.20E-04	2	2.60E-04	3	3.90E-04	4	6.50E-04	5	7.80E-04
		6	2.70E-03	7	1.11E-02	8	1.92E-02	9	4.87E-02	10	8.64E-02
		11	1.62E-01	12	1.64E-01	13	1.65E-01	14	1.58E-01	15	2.54E-01
		16	2.46E-01	17	5.69E-02	18	1.01E-02	-1			
103	340890	1	3.34E-04	2	1.67E-04	3	2.51E-04	4	4.18E-04	5	5.01E-04
		6	1.73E-03	7	7.14E-03	8	1.23E-02	9	3.13E-02	10	5.55E-02
		11	1.03E-01	12	9.98E-02	13	9.74E-02	14	8.78E-02	15	1.27E-01
		16	1.03E-01	17	1.83E-02	18	8.27E-04	-1			
103	350890	1	2.31E-04	2	1.15E-04	3	1.73E-04	4	2.89E-04	5	3.46E-04
		6	1.20E-03	7	5.53E-03	8	3.81E-02	9	3.66E-02	10	1.97E-01
		11	2.46E-01	12	1.51E-01	13	1.51E-01	14	8.87E-02	15	1.38E-01
		16	1.96E-01	17	9.18E-03	18	2.86E-05	-1			
103	360890	5	6.03E-04	7	2.31E-01	8	1.23E-01	9	3.57E-01	10	3.19E-01
		11	2.38E-01	12	2.18E-01	13	6.57E-02	14	5.99E-02	15	9.79E-02
		16	8.38E-03	-1							
103	370890	6	1.16E-04	7	1.97E-02	9	1.01E-01	10	9.56E-02	11	1.02E+00
		12	3.16E-02	13	1.62E-01	14	1.20E-01	15	1.40E-02	16	7.54E-04
		-1									
103	390891	1	5.43E-03	10	9.91E-01	-1					

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103	330900	1	5.00E-04	2	2.50E-04	3	3.75E-04	4	6.24E-04	5	7.49E-04
		6	2.59E-03	7	1.07E-02	8	1.85E-02	9	4.68E-02	10	8.30E-02
		11	1.57E-01	12	1.67E-01	13	1.74E-01	14	1.69E-01	15	2.81E-01
		16	2.84E-01	17	6.92E-02	18	1.26E-02	-1			
103	340900	1	5.23E-04	2	2.62E-04	3	3.92E-04	4	6.54E-04	5	7.85E-04
		6	2.71E-03	7	1.12E-02	8	1.93E-02	9	4.90E-02	10	8.69E-02
		11	1.61E-01	12	1.51E-01	13	1.38E-01	14	1.20E-01	15	1.74E-01
		16	1.37E-01	17	2.26E-02	18	1.13E-03	-1			
103	350900	1	9.88E-04	2	3.65E-04	3	5.48E-04	4	9.13E-04	5	1.10E-03
		6	3.79E-03	7	1.56E-02	8	6.58E-02	9	1.58E-01	10	6.03E-01
		11	4.26E-01	12	2.39E-01	13	1.77E-01	14	1.42E-01	15	1.17E-01
		16	4.25E-02	17	3.79E-06	18	2.84E-07	-1			
103	360900	1	2.28E-02	6	3.95E-01	7	1.41E-01	8	2.38E-02	9	4.14E-01
		10	3.72E-02	11	4.50E-01	12	2.09E-01	13	2.97E-02	14	1.47E-02
		15	4.33E-03	16	3.10E-04	-1					
		1	3.55E-04	2	1.77E-04	3	2.66E-04	4	4.44E-04	5	5.32E-04
103	370900	6	1.84E-03	7	7.75E-03	8	1.31E-02	9	3.33E-02	10	1.31E-01
		11	1.28E-01	12	1.08E-01	13	1.05E-01	14	9.00E-02	15	1.48E-01
		16	1.38E-01	17	6.00E-03	-1					
		1	1.38E-02	6	2.19E-03	8	1.02E-02	9	1.26E-02	10	1.07E+00
103	370901	11	3.47E-01	12	1.38E-01	13	8.70E-02	14	1.62E-01	15	2.40E-01
		16	5.22E-02	-1							
		1	7.47E-05	-1							
		1	7.28E-02	7	9.73E-01	9	9.11E-01	-1			
103	390901	1	1.51E-05	6	4.19E-02	8	4.20E-05	13	1.00E+00	-1	
103	340910	1	4.79E-04	2	2.40E-04	3	3.60E-04	4	5.99E-04	5	7.19E-04
		6	2.49E-03	7	1.02E-02	8	1.77E-02	9	4.49E-02	10	7.96E-02
		11	1.49E-01	12	1.51E-01	13	1.50E-01	14	1.39E-01	15	2.10E-01
		16	1.80E-01	17	3.39E-02	18	4.60E-03	-1			
103	350910	1	3.80E-04	2	1.90E-04	3	2.85E-04	4	4.75E-04	5	5.70E-04
		6	1.97E-03	7	8.12E-03	8	1.40E-02	9	3.56E-02	10	6.31E-02
		11	1.18E-01	12	1.15E-01	13	1.12E-01	14	1.02E-01	15	1.47E-01
		16	1.13E-01	17	1.84E-02	18	1.40E-03	-1			
103	360910	1	3.31E-02	2	2.55E-04	3	3.82E-04	4	6.37E-04	5	7.64E-04
		6	4.38E-01	7	1.27E-02	8	7.73E-02	9	4.38E-01	10	1.82E-01
		11	3.92E-01	12	2.01E-01	13	9.88E-02	14	1.02E-01	15	5.93E-02
		16	2.02E-03	17	2.61E-07	-1					
103	370910	1	2.59E-01	5	3.37E-01	8	1.04E-01	9	4.29E-02	10	2.15E-02
		11	1.03E-01	12	1.95E-01	13	3.78E-02	14	1.83E-01	15	2.19E-01
		16	9.34E-02	-1							
		1	3.33E-04	6	7.35E-04	7	1.74E-02	8	2.47E-03	9	1.42E-01
103	380910	10	2.88E-01	11	3.59E-01	12	5.51E-03	13	8.35E-05	-1	
		11	3.00E-03	-1							
		1	3.23E-02	9	9.49E-01	-1					
		1	3.77E-04	2	1.89E-04	3	2.83E-04	4	4.71E-04	5	5.66E-04
103	340920	6	1.96E-03	7	8.06E-03	8	1.39E-02	9	3.53E-02	10	6.26E-02
		11	1.17E-01	12	1.15E-01	13	1.10E-01	14	9.87E-02	15	1.49E-01
		16	1.25E-01	17	2.31E-02	18	3.00E-03	-1			
		1	9.86E-04	2	4.93E-04	3	7.40E-04	4	1.23E-03	5	1.48E-03
103	350920	6	5.12E-03	7	2.11E-02	8	3.65E-02	9	9.23E-02	10	1.64E-01
		11	2.97E-01	12	2.51E-01	13	2.12E-01	14	1.68E-01	15	2.07E-01
		16	1.11E-01	17	2.74E-03	18	5.29E-07	-1			
		1	2.16E-02	6	6.41E-01	7	1.80E-02	8	9.31E-02	9	2.07E-01
103	360920	10	2.05E-01	11	6.90E-01	12	2.22E-02	13	1.65E-02	14	1.67E-02
		15	1.06E-02	-1							
		5	3.91E-04	8	3.64E-03	9	1.36E-02	10	8.73E-02	11	1.80E-02
		12	1.68E-02	13	3.67E-03	14	1.74E-02	15	5.19E-03	16	5.36E-02
103	370920	17	5.34E-03	-1							
		7	2.93E-02	8	3.33E-02	9	6.48E-03	10	3.60E-02	11	9.28E-01

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		-1				
103	390920	8 2.34E-02	9 2.89E-02	10 1.58E-01	11 5.02E-02	12 3.94E-03
		13 4.11E-04	14 4.17E-05	15 4.17E-05	-1	
103	340930	1 5.93E-04	2 2.96E-04	3 4.44E-04	4 7.41E-04	5 8.89E-04
		6 3.07E-03	7 1.27E-02	8 2.19E-02	9 5.55E-02	10 9.84E-02
		11 1.86E-01	12 1.93E-01	13 1.95E-01	14 1.81E-01	15 2.78E-01
		16 2.43E-01	17 4.81E-02	18 7.01E-03	-1	
103	350930	1 5.95E-04	2 2.98E-04	3 4.46E-04	4 7.44E-04	5 8.93E-04
		6 3.09E-03	7 1.27E-02	8 2.20E-02	9 5.57E-02	10 9.88E-02
		11 1.86E-01	12 1.89E-01	13 1.87E-01	14 1.71E-01	15 2.53E-01
		16 2.01E-01	17 3.38E-02	18 4.07E-03	-1	
103	360930	1 1.57E-02	4 2.58E-03	5 1.54E-02	7 8.76E-01	8 2.45E-01
		9 4.83E-02	10 7.41E-02	11 1.82E-01	12 2.50E-01	13 1.67E-01
		14 1.81E-01	15 9.17E-02	16 8.03E-03	-1	
103	370930	1 2.65E-03	7 9.65E-02	8 1.75E-01	9 8.79E-03	10 1.52E-01
		11 1.61E-01	12 1.86E-01	13 9.70E-02	14 9.71E-02	15 1.62E-01
		16 2.35E-02	-1			
103	380930	1 8.92E-04	7 8.30E-02	8 1.01E-01	9 8.11E-01	10 7.89E-01
		11 3.55E-01	12 1.75E-01	13 6.07E-02	14 5.96E-02	15 1.87E-03
		-1				
103	390930	1 1.22E-03	7 7.50E-02	8 5.18E-04	9 6.58E-03	10 2.14E-02
		11 8.81E-03	12 1.64E-02	13 3.44E-03	14 1.12E-04	-1
103	410931	1 1.37E-01	-1			
103	350940	1 6.56E-04	2 3.28E-04	3 4.92E-04	4 8.19E-04	5 9.83E-04
		6 3.40E-03	7 1.40E-02	8 2.42E-02	9 6.14E-02	10 1.09E-01
		11 2.07E-01	12 2.21E-01	13 2.26E-01	14 2.10E-01	15 3.21E-01
		16 2.72E-01	17 4.89E-02	18 6.37E-03	-1	
103	360940	1 4.27E-04	2 2.13E-04	3 3.20E-04	4 5.33E-04	5 6.40E-04
		6 2.21E-03	7 9.12E-03	8 1.58E-02	9 3.99E-02	10 7.08E-02
		11 1.31E-01	12 1.17E-01	13 9.89E-02	14 7.74E-02	15 9.47E-02
		16 5.26E-02	17 2.33E-03	-1		
103	370940	1 2.36E-04	6 8.71E-04	7 7.84E-03	8 4.36E-04	9 6.97E-02
		10 9.28E-01	11 1.12E+00	12 4.11E-01	13 1.43E-01	14 3.95E-02
		15 7.49E-02	16 1.52E-02	17 1.74E-04	-1	
103	380940	1 5.34E-04	2 2.67E-04	3 4.01E-04	4 6.68E-04	5 8.01E-04
		6 2.79E-03	7 1.14E-02	8 1.97E-02	9 5.67E-02	10 1.08E-01
		11 4.36E-01	12 1.35E-01	13 1.17E-01	14 9.11E-02	15 3.09E-02
		-1				
103	390940	8 2.07E-02	9 5.29E-02	10 5.75E-01	11 7.67E-02	12 3.07E-02
		13 1.55E-02	14 8.68E-03	15 2.22E-03	16 3.92E-04	-1
103	410940	10 1.98E+00	-1			
103	410941	1 4.05E-01	3 3.65E-04	4 3.65E-04	10 5.00E-03	-1
103	350950	1 6.37E-04	2 3.18E-04	3 4.78E-04	4 7.96E-04	5 9.55E-04
		6 3.30E-03	7 1.36E-02	8 2.35E-02	9 5.96E-02	10 1.06E-01
		11 2.00E-01	12 2.06E-01	13 2.02E-01	14 1.82E-01	15 2.58E-01
		16 1.91E-01	17 2.82E-02	18 2.96E-03	-1	
103	360950	1 6.83E-04	2 3.41E-04	3 5.12E-04	4 8.53E-04	5 1.02E-03
		6 3.54E-03	7 1.46E-02	8 2.52E-02	9 6.39E-02	10 1.13E-01
		11 2.14E-01	12 2.09E-01	13 1.92E-01	14 1.65E-01	15 2.29E-01
		16 1.58E-01	17 2.10E-02	18 1.62E-03	-1	
103	370950	1 1.04E-02	2 1.85E-04	3 2.77E-04	4 4.62E-04	5 5.54E-04
		6 3.27E-03	7 9.33E-02	8 3.61E-01	9 1.84E-01	10 1.09E-01
		11 2.09E-01	12 1.65E-01	13 1.41E-01	14 1.20E-01	15 9.76E-02
		16 2.01E-03	17 3.64E-06	18 6.07E-08	-1	
103	380950	1 1.13E-03	2 4.56E-04	3 6.84E-04	4 1.14E-03	5 1.37E-03
		6 4.73E-03	7 2.45E-02	8 3.57E-02	9 3.23E-01	10 2.30E-01
		11 2.20E-01	12 1.28E-02	13 5.81E-02	14 1.34E-01	15 6.58E-02
		16 2.20E-02	17 1.56E-10	-1		
103	390950	8 1.93E-02	9 1.19E-02	10 1.58E-01	11 8.40E-02	12 9.60E-02

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		13	9.73E-02	14	5.41E-02	15	8.53E-02	16	4.74E-04	-1
103	400950	1	9.79E-04	10	9.86E-01	-1				
103	410950	1	1.05E-03	7	2.79E-04	9	1.30E-04	10	9.98E-01	-1
103	410951	1	1.58E+00	7	9.17E-01	9	5.36E-04	-1		
103	350960	1	6.93E-04	2	3.47E-04	3	5.20E-04	4	8.67E-04	5 1.04E-03
		6	3.60E-03	7	1.48E-02	8	2.56E-02	9	6.49E-02	10 1.15E-01
		11	2.20E-01	12	2.40E-01	13	2.46E-01	14	2.26E-01	15 3.37E-01
		16	2.70E-01	17	4.55E-02	18	5.49E-03	-1		
103	360960	1	3.93E-04	2	1.96E-04	3	2.94E-04	4	4.91E-04	5 5.89E-04
		6	2.04E-03	7	8.39E-03	8	1.45E-02	9	3.67E-02	10 6.52E-02
		11	1.22E-01	12	1.14E-01	13	1.01E-01	14	8.19E-02	15 1.04E-01
		16	6.06E-02	17	5.70E-03	18	2.55E-05	-1		
103	370960	1	3.41E-03	2	1.71E-04	3	2.56E-04	4	4.27E-04	5 5.13E-04
		6	1.77E-03	7	7.31E-03	8	5.33E-02	9	1.77E-01	10 9.80E-01
		11	3.20E-01	12	2.21E-01	13	1.81E-01	14	1.03E-01	15 1.16E-01
		16	6.17E-02	17	9.86E-07	18	1.02E-07	-1		
103	380960	1	5.30E-02	2	1.25E-04	3	1.88E-04	4	3.14E-04	5 3.76E-04
		6	4.46E-01	7	5.78E-02	8	1.24E-02	9	8.55E-02	10 5.28E-01
		11	8.32E-02	12	8.21E-02	13	6.56E-02	14	5.54E-02	15 5.57E-02
		16	1.24E-02	-1						
103	390960	1	2.42E-04	2	1.21E-04	3	1.82E-04	4	3.03E-04	5 3.63E-04
		6	1.64E-03	7	5.17E-03	8	9.21E-03	9	2.49E-02	10 4.09E-02
		11	7.53E-02	12	8.40E-02	13	6.87E-02	14	5.87E-02	15 8.37E-02
		16	5.61E-02	17	6.25E-03	-1				
103	410960	1	1.79E-03	6	8.49E-04	7	6.83E-02	8	5.51E-02	9 9.17E-01
		10	1.40E+00	11	7.27E-01	12	1.54E-03	-1		
103	360970	1	5.62E-04	2	2.81E-04	3	4.21E-04	4	7.02E-04	5 8.43E-04
		6	2.91E-03	7	1.20E-02	8	2.08E-02	9	5.26E-02	10 9.33E-02
		11	1.76E-01	12	1.82E-01	13	1.77E-01	14	1.54E-01	15 2.09E-01
		16	1.41E-01	17	1.77E-02	18	1.53E-03	-1		
103	370970	1	3.56E-02	2	3.88E-04	3	4.87E-03	4	5.05E-02	5 5.32E-03
		6	7.27E-02	7	2.97E-01	8	1.92E-01	9	5.92E-01	10 2.48E-01
		11	2.70E-01	12	2.16E-01	13	1.65E-01	14	1.32E-01	15 1.33E-01
		16	5.94E-02	17	9.59E-04	18	4.64E-08	-1		
103	380970	1	8.34E-04	6	2.50E-03	7	1.15E-02	8	2.11E-01	9 3.06E-01
		10	3.62E-01	11	1.35E-01	12	3.15E-01	13	1.85E-01	14 9.15E-02
		-1								
103	390970	1	1.21E-03	2	3.77E-04	3	5.66E-04	4	9.44E-04	5 1.13E-03
		6	3.92E-03	7	1.96E-02	8	2.79E-02	9	7.33E-02	10 1.28E-01
		11	2.63E-01	12	1.90E-01	13	1.05E-01	14	5.53E-02	15 7.60E-02
		16	7.16E-06	17	3.96E-07	-1				
103	400970	1	3.43E-05	6	6.50E-04	7	1.75E-02	8	2.58E-02	9 7.43E-02
		10	3.23E-02	11	6.98E-02	12	1.40E-02	-1		
103	410970	1	1.43E-03	7	9.82E-04	9	9.83E-01	10	1.76E-03	11 1.37E-02
		12	1.46E-03	-1						
103	410971	10	9.79E-01	-1						
103	360980	1	4.33E-04	2	2.16E-04	3	3.25E-04	4	5.41E-04	5 6.49E-04
		6	2.24E-03	7	9.25E-03	8	1.60E-02	9	4.05E-02	10 7.19E-02
		11	1.35E-01	12	1.31E-01	13	1.19E-01	14	9.74E-02	15 1.25E-01
		16	7.37E-02	17	7.45E-03	18	3.45E-04	-1		
103	370980	1	7.45E-02	2	2.66E-04	3	4.00E-04	4	6.66E-04	5 8.62E-03
		6	2.62E-01	7	3.18E-02	8	2.04E-02	9	6.08E-02	10 1.06E-01
		11	2.34E-01	12	2.83E-01	13	2.55E-01	14	1.19E-01	15 1.91E-01
		16	7.77E-02	17	6.45E-03	18	9.59E-05	-1		
103	380980	1	3.66E-01	2	5.71E-04	3	2.38E-02	4	1.03E-02	5 1.71E-03
		6	8.83E-02	7	3.48E-02	8	1.34E-01	9	1.42E-01	10 1.90E-01
		11	3.37E-01	12	1.68E-01	13	8.30E-03	14	2.73E-05	15 3.56E-05
		16	1.77E-05	-1						
103	390980	1	1.04E-01	2	2.31E-04	3	3.47E-04	4	5.78E-04	5 6.94E-04

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		6 2.40E-03	7 6.42E-02	8 2.67E-02	9 7.10E-02	10 9.91E-02
		11 2.88E-01	12 2.11E-01	13 1.40E-01	14 1.41E-01	15 1.03E-01
		16 3.66E-02	17 1.49E-07	18 2.56E-13	-1	
103	400980	1 1.76E-04	2 8.80E-05	3 1.32E-04	4 2.20E-04	5 2.64E-04
		6 9.13E-04	7 3.76E-03	8 6.51E-03	9 1.65E-02	10 2.92E-02
		11 5.19E-02	12 3.04E-02	13 4.32E-03	-1	
103	410980	1 2.24E-04	2 1.12E-04	3 1.68E-04	4 2.80E-04	5 3.36E-04
		6 1.16E-03	7 4.79E-03	8 1.03E-02	9 4.39E-02	10 1.42E-01
		11 1.46E-01	12 7.03E-02	13 6.35E-02	14 4.84E-02	15 3.29E-02
		16 3.20E-03	-1			
103	410981	5 3.92E-03	6 1.68E-03	7 3.56E-02	8 1.30E-01	9 1.25E-01
		10 2.08E+00	11 3.92E-01	12 3.11E-01	13 2.38E-02	14 5.68E-03
		15 2.52E-04	-1			
103	370990	1 7.49E-04	2 3.74E-04	3 5.62E-04	4 9.36E-04	5 1.12E-03
		6 3.88E-03	7 1.60E-02	8 2.77E-02	9 7.01E-02	10 1.24E-01
		11 2.32E-01	12 2.17E-01	13 1.86E-01	14 1.44E-01	15 1.69E-01
		16 8.50E-02	17 5.83E-03	18 6.86E-06	-1	
103	380990	1 1.93E-02	2 1.47E-04	3 2.20E-04	4 1.41E-02	5 4.41E-04
		6 1.81E-01	7 4.01E-02	8 2.25E-02	9 3.20E-01	10 6.73E-02
		11 3.49E-01	12 1.99E-01	13 3.11E-01	14 4.52E-02	15 4.87E-02
		16 2.02E-02	17 1.52E-04	18 5.91E-10	-1	
103	390990	1 6.61E-02	2 1.52E-04	3 2.28E-04	4 7.04E-03	5 9.23E-03
		6 3.59E-01	7 6.73E-02	8 5.00E-02	9 3.36E-01	10 2.81E-01
		11 1.68E-01	12 1.23E-01	13 4.85E-02	14 2.91E-02	15 1.56E-02
		16 3.12E-07	17 2.37E-09	-1		
103	400990	1 1.46E-01	2 1.66E-02	4 2.20E-02	5 2.80E-02	7 5.40E-02
		8 1.28E-01	9 1.48E+00	10 5.52E-03	-1	
103	410990	1 4.41E-01	2 1.67E-04	3 2.51E-04	4 4.18E-04	5 2.77E-01
		6 5.83E-01	7 7.14E-03	8 1.24E-02	9 3.13E-02	10 5.55E-02
		11 1.06E-01	12 7.32E-02	13 3.93E-02	14 2.07E-02	15 9.69E-03
		-1				
103	410991	1 8.50E-02	2 3.45E-04	3 5.18E-04	4 8.63E-04	5 3.06E-03
		6 3.98E-03	7 1.64E-02	8 2.69E-02	9 6.81E-02	10 1.17E-01
		11 2.12E-01	12 1.77E-01	13 1.41E-01	14 1.13E-01	15 1.08E-01
		16 8.20E-07	-1			
103	420990	1 3.28E-02	2 5.99E-03	3 5.28E-03	4 5.28E-03	5 3.03E-05
		6 4.52E-02	7 6.03E-02	8 1.22E-02	9 1.07E-03	10 1.65E-01
		11 1.69E-05	-1			
103	430991	1 6.60E-02	2 1.20E-02	6 8.91E-01	-1	
103	371000	1 7.71E-04	2 3.85E-04	3 5.78E-04	4 9.63E-04	5 1.16E-03
		6 4.00E-03	7 1.65E-02	8 2.85E-02	9 7.21E-02	10 1.28E-01
		11 2.44E-01	12 2.67E-01	13 2.67E-01	14 2.37E-01	15 3.32E-01
		16 2.33E-01	17 3.14E-02	18 2.98E-03	-1	
103	381000	1 3.62E-02	2 2.37E-04	3 3.55E-04	4 5.75E-02	5 1.61E-02
		6 3.67E-03	7 3.55E-02	8 2.54E-02	9 5.94E-02	10 2.41E-01
		11 1.56E-01	12 1.20E-01	13 8.69E-02	14 5.83E-02	15 5.55E-02
		16 1.25E-02	17 1.80E-07	-1		
103	391000	1 4.07E-04	2 2.03E-04	3 3.05E-04	4 5.08E-04	5 6.10E-04
		6 1.56E-01	7 7.44E-01	8 3.23E-02	9 2.32E-01	10 2.17E-01
		11 3.07E-01	12 2.04E-01	13 2.28E-01	14 3.23E-01	15 8.01E-02
		16 1.65E-02	17 2.43E-07	18 9.28E-09	-1	
103	401000	1 2.53E-04	2 1.26E-04	3 1.90E-04	4 3.16E-04	5 3.79E-04
		6 5.73E-03	7 7.12E-03	8 1.37E-01	9 2.33E-01	10 4.44E-02
		11 7.97E-02	12 7.66E-02	13 5.74E-02	14 3.74E-02	15 6.48E-03
		-1				
103	411000	7 8.80E-02	8 1.48E-02	9 5.79E-01	10 9.09E-02	11 1.07E-01
		12 7.52E-02	13 1.39E-02	14 1.15E-02	-1	
103	411001	7 5.34E-02	9 1.95E+00	10 4.98E-01	11 3.45E-01	-1
103	431000	8 2.94E-04	9 1.28E-01	10 7.91E-04	11 1.47E-03	12 5.05E-03

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		13	1.89E-04	14	1.40E-05	-1						
103	371010	1	5.77E-04	2	2.89E-04	3	4.33E-04	4	7.22E-04	5	8.37E-02	
		6	1.96E-01	7	9.71E-01	8	1.11E-01	9	5.40E-02	10	9.59E-02	
		11	4.50E-01	12	1.78E-01	13	1.62E-01	14	1.33E-01	15	1.68E-01	
		16	9.64E-02	17	9.22E-03	18	5.51E-04	-1				
103	381010	1	5.14E-04	2	2.57E-04	3	3.86E-04	4	6.43E-04	5	1.55E-02	
		6	1.95E-01	7	7.10E-02	8	6.92E-02	9	2.99E-01	10	1.58E-01	
		11	4.37E-01	12	2.07E-01	13	1.45E-01	14	1.96E-01	15	1.00E-01	
		16	4.52E-02	17	2.10E-03	18	1.50E-08	-1				
103	391010	1	7.23E-02	2	1.69E-04	3	2.53E-04	4	4.21E-04	5	1.26E-01	
		6	5.02E-02	7	9.22E-02	8	1.80E-02	9	1.15E-01	10	1.39E-01	
		11	1.73E-01	12	1.15E-01	13	1.04E-01	14	7.09E-02	15	7.85E-02	
		16	3.64E-02	17	1.84E-03	-1						
103	401010	1	1.68E-02	2	1.20E-04	3	1.80E-04	4	3.01E-04	5	3.61E-04	
		6	8.98E-02	7	6.67E-02	8	1.68E-02	9	7.63E-02	10	1.28E-01	
		11	1.15E-01	12	1.33E-01	13	8.16E-02	14	4.56E-02	15	4.44E-02	
		16	1.60E-02	-1								
103	411010	1	2.25E-01	2	1.33E-04	3	6.97E-02	4	6.98E-02	5	1.79E-03	
		6	2.36E-02	7	2.50E-01	8	5.34E-02	9	9.82E-02	10	7.96E-02	
		11	8.89E-02	12	6.54E-02	13	4.38E-02	14	2.95E-02	15	2.69E-02	
		16	3.09E-03	-1								
103	421010	1	1.25E-01	2	5.97E-03	5	3.84E-02	6	4.47E-03	7	2.28E-01	
		8	6.80E-02	9	5.33E-01	10	1.97E-01	11	4.10E-01	12	1.59E-01	
		13	1.11E-01	-1								
103	431010	1	1.32E-02	2	2.44E-03	6	2.86E-02	7	2.98E-02	8	8.85E-01	
		9	7.84E-02	10	1.51E-02	-1						
103	381020	1	5.01E-04	2	2.50E-04	3	1.74E-03	4	2.10E-02	5	3.54E-02	
		6	1.15E-02	7	2.66E-01	8	2.63E-02	9	5.40E-02	10	1.05E-01	
		11	2.40E-01	12	1.39E-01	13	1.06E-01	14	7.51E-02	15	7.78E-02	
		16	3.00E-02	17	3.05E-04	18	7.57E-10	-1				
103	391020	1	1.01E-03	2	5.04E-04	3	7.56E-04	4	1.26E-03	5	1.51E-03	
		6	5.23E-03	7	2.15E-02	8	3.73E-02	9	9.43E-02	10	1.67E-01	
		11	3.16E-01	12	3.09E-01	13	2.72E-01	14	2.11E-01	15	2.47E-01	
		16	1.24E-01	17	8.80E-03	18	1.21E-04	-1				
103	401020	1	1.24E-03	2	6.34E-03	3	7.86E-04	4	3.00E-02	5	1.01E-02	
		6	1.71E-02	7	4.61E-02	8	4.50E-02	9	1.92E-01	10	1.78E-01	
		11	3.05E-01	12	4.22E-02	13	3.13E-05	14	1.87E-05	15	5.70E-06	
		-1										
103	411020	1	5.44E-04	2	2.72E-04	3	4.08E-04	4	6.80E-04	5	8.16E-04	
		6	2.82E-03	7	1.16E-02	8	2.01E-02	9	5.09E-02	10	9.03E-02	
		11	1.67E-01	12	1.43E-01	13	1.12E-01	14	7.99E-02	15	8.90E-02	
		16	2.60E-02	17	8.89E-09	-1						
103	421020	1	1.34E-04	2	6.69E-05	3	2.18E-04	4	2.85E-04	5	1.18E-03	
		6	3.89E-02	7	5.40E-02	8	7.03E-03	9	1.08E-02	10	2.27E-02	
		11	5.27E-08	-1								
103	431020	1	4.96E-04	2	2.48E-04	3	3.72E-04	4	6.20E-04	5	7.44E-04	
		6	2.57E-03	7	1.07E-02	8	1.83E-02	9	7.73E-02	10	8.59E-02	
		11	1.55E-01	12	1.03E-01	13	7.17E-02	14	5.71E-02	15	8.49E-02	
		16	2.04E-02	-1								
103	431021	8	5.52E-02	9	1.47E+00	10	8.35E-03	11	4.87E-01	12	3.30E-01	
		13	2.50E-01	14	5.05E-03	-1						
103	381030	1	6.29E-04	2	3.14E-04	3	4.72E-04	4	7.86E-04	5	9.43E-04	
		6	3.26E-03	7	1.34E-02	8	2.32E-02	9	5.89E-02	10	1.04E-01	
		11	1.98E-01	12	2.04E-01	13	1.92E-01	14	1.60E-01	15	2.03E-01	
		16	1.19E-01	17	1.17E-02	18	7.71E-04	-1				
103	391030	1	5.11E-04	2	2.55E-04	3	3.83E-04	4	6.38E-04	5	7.66E-04	
		6	2.65E-03	7	1.09E-02	8	1.89E-02	9	4.78E-02	10	8.48E-02	
		11	1.60E-01	12	1.57E-01	13	1.41E-01	14	1.12E-01	15	1.30E-01	
		16	6.37E-02	17	4.53E-03	18	5.86E-05	-1				



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103	401030	1	4.45E-06	2	2.23E-06	3	3.34E-06	4	5.57E-06	5	6.68E-06
		6	2.31E-05	7	9.52E-05	8	1.65E-04	9	4.17E-04	10	7.40E-04
		11	1.38E-03	12	1.30E-03	13	1.14E-03	14	8.63E-04	15	8.87E-04
		16	3.68E-04	17	1.02E-05	-1					
103	411030	1	7.99E-04	2	3.99E-04	3	5.99E-04	4	9.99E-04	5	1.20E-03
		6	4.14E-03	7	1.71E-02	8	2.95E-02	9	7.48E-02	10	1.33E-01
		11	2.39E-01	12	1.66E-01	13	8.38E-02	14	1.49E-02	15	2.40E-06
		16	3.68E-07	-1							
103	421030	1	4.07E-01	2	7.60E-02	3	1.10E-01	4	1.10E-01	5	4.73E-01
		7	3.12E-01	8	4.14E-01	9	6.14E-01	10	8.36E-02	11	3.43E-01
		-1									
103	431030	1	1.85E-02	2	3.52E-03	3	3.37E-04	4	5.62E-04	5	6.74E-04
		6	1.12E-01	7	1.05E-01	8	1.97E-01	9	1.18E-01	10	9.72E-02
		11	1.40E-01	12	6.10E-02	13	7.28E-03	-1			
103	441030	1	6.40E-04	2	9.99E-03	3	2.60E-05	4	4.46E-03	6	1.09E-04
		7	3.27E-03	8	3.73E-03	9	9.78E-01	-1			
103	451031	1	4.00E-02	2	7.70E-02	3	6.80E-04	-1			
103	381040	1	4.73E-04	2	2.36E-04	3	3.55E-04	4	5.91E-04	5	7.09E-04
		6	2.45E-03	7	1.01E-02	8	1.75E-02	9	4.43E-02	10	7.85E-02
		11	1.48E-01	12	1.43E-01	13	1.27E-01	14	1.01E-01	15	1.22E-01
		16	6.42E-02	17	5.31E-03	18	1.89E-04	-1			
103	391040	1	7.68E-04	2	3.84E-04	3	5.76E-04	4	9.60E-04	5	1.15E-03
		6	3.98E-03	7	1.64E-02	8	2.84E-02	9	7.19E-02	10	1.28E-01
		11	2.43E-01	12	2.57E-01	13	2.45E-01	14	2.05E-01	15	2.61E-01
		16	1.52E-01	17	1.46E-02	18	9.09E-04	-1			
103	401040	1	4.10E-04	2	2.05E-04	3	3.07E-04	4	5.12E-04	5	6.14E-04
		6	2.12E-03	7	8.75E-03	8	1.51E-02	9	3.83E-02	10	6.80E-02
		11	1.25E-01	12	1.02E-01	13	7.37E-02	14	4.81E-02	15	4.31E-02
		16	7.19E-03	-1							
103	411040	1	1.12E-03	2	5.59E-04	3	8.38E-04	4	1.40E-03	5	1.68E-03
		6	5.80E-03	7	2.39E-02	8	4.13E-02	9	1.05E-01	10	1.86E-01
		11	3.45E-01	12	3.13E-01	13	2.61E-01	14	2.00E-01	15	2.09E-01
		16	6.88E-02	17	2.17E-07	18	1.16E-08	-1			
103	421040	1	1.42E+00	2	2.60E-01	3	1.05E-01	4	5.17E-01	5	5.89E-02
		6	1.57E-02	7	2.96E-02	8	7.43E-02	9	5.75E-02	10	1.01E-01
		11	1.55E-01	12	8.41E-02	13	6.67E-03	-1			
103	431040	1	9.12E-03	2	1.69E-03	6	1.78E-03	7	6.78E-02	8	9.40E-01
		9	3.97E-01	10	2.58E-01	11	1.72E-01	12	3.15E-01	13	1.16E-01
		14	8.86E-02	15	6.35E-02	-1					
103	451040	1	2.83E-03	2	5.30E-04	9	2.01E-02	10	2.09E-04	11	7.84E-04
		12	1.02E-05	-1							
103	451041	1	6.40E-02	2	6.56E-01	4	4.83E-01	5	5.07E-02	-1	
103	391050	1	5.80E-04	2	2.90E-04	3	4.35E-04	4	7.26E-04	5	8.71E-04
		6	3.01E-03	7	1.24E-02	8	2.15E-02	9	5.43E-02	10	9.64E-02
		11	1.82E-01	12	1.83E-01	13	1.67E-01	14	1.34E-01	15	1.58E-01
		16	8.00E-02	17	6.20E-03	18	2.40E-04	-1			
103	401050	1	5.15E-04	2	2.57E-04	3	3.86E-04	4	6.43E-04	5	7.72E-04
		6	2.67E-03	7	1.10E-02	8	1.90E-02	9	4.82E-02	10	8.54E-02
		11	1.60E-01	12	1.54E-01	13	1.34E-01	14	1.03E-01	15	1.09E-01
		16	4.67E-02	17	2.20E-03	-1					
103	411050	1	4.77E-04	2	2.39E-04	3	3.58E-04	4	5.97E-04	5	7.16E-04
		6	2.48E-03	7	1.02E-02	8	1.76E-02	9	4.47E-02	10	7.92E-02
		11	1.48E-01	12	1.41E-01	13	1.17E-01	14	7.83E-02	15	7.78E-02
		16	2.80E-02	17	9.93E-05	-1					
103	421050	1	1.65E-01	2	3.02E-02	3	3.66E-04	4	1.73E-02	5	1.42E-01
		6	5.89E-02	7	1.57E-01	8	8.05E-02	9	5.74E-02	10	9.75E-02
		11	1.71E-01	12	1.39E-01	13	1.01E-01	14	6.99E-02	15	7.66E-02
		16	2.32E-02	-1							
103	431050	2	1.57E-02	3	1.96E-04	4	1.13E-02	5	7.19E-02	6	3.66E-01

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		7	3.23E-01	8	2.98E-01	9	2.92E-01	10	1.12E-01	11	9.04E-02
		12	4.79E-02	13	5.93E-02	-1					
103	441050	1	3.31E-04	2	4.99E-03	4	6.60E-04	5	5.20E-04	6	1.80E-02
		7	7.07E-02	8	2.04E-01	9	4.08E-01	10	5.41E-01	11	7.62E-03
		12	7.70E-04	-1							
103	451050	1	2.95E-04	2	4.11E-03	3	2.48E-04	7	1.66E-03	8	2.42E-01
		-1									
103	451051	1	3.69E-02	2	4.17E-01	6	2.00E-01	-1			
103	391060	1	8.34E-04	2	4.17E-04	3	6.25E-04	4	1.04E-03	5	1.25E-03
		6	4.33E-03	7	1.78E-02	8	3.08E-02	9	7.80E-02	10	1.38E-01
		11	2.64E-01	12	2.85E-01	13	2.73E-01	14	2.29E-01	15	2.93E-01
		16	1.72E-01	17	1.68E-02	18	1.13E-03	-1			
103	401060	1	4.34E-04	2	2.17E-04	3	3.25E-04	4	5.42E-04	5	6.51E-04
		6	2.25E-03	7	9.27E-03	8	1.60E-02	9	4.06E-02	10	7.20E-02
		11	1.33E-01	12	1.14E-01	13	8.68E-02	14	5.92E-02	15	5.73E-02
		16	1.81E-02	-1							
103	411060	1	5.88E-04	2	2.94E-04	3	4.41E-04	4	7.35E-04	5	8.82E-04
		6	3.05E-03	7	1.26E-02	8	2.17E-02	9	5.51E-02	10	9.77E-02
		11	1.85E-01	12	1.91E-01	13	1.76E-01	14	1.42E-01	15	1.71E-01
		16	9.26E-02	17	7.26E-03	18	2.81E-04	-1			
103	421060	1	4.49E-04	2	2.24E-04	3	3.36E-04	4	5.61E-04	5	6.73E-04
		6	2.33E-03	7	9.59E-03	8	1.66E-02	9	4.20E-02	10	7.45E-02
		11	1.35E-01	12	1.02E-01	13	6.73E-02	14	3.75E-02	15	1.55E-02
		-1									
103	431060	1	1.34E-02	2	2.54E-03	3	1.48E-04	4	2.47E-04	5	2.96E-04
		6	1.02E-03	7	5.64E-01	8	2.01E-02	9	1.01E-01	10	1.39E-01
		11	9.30E-02	12	2.05E-01	13	2.36E-01	14	2.93E-01	15	2.02E-01
		16	2.19E-02	17	3.76E-04	-1					
103	451060	1	7.90E-05	2	1.06E-03	8	1.03E-03	9	3.11E-01	10	4.56E-03
		11	2.13E-02	12	2.70E-03	13	8.33E-04	14	8.48E-05	15	1.79E-06
		-1									
103	451061	1	6.90E-04	2	9.33E-03	7	9.06E-02	8	3.15E-01	9	1.39E+00
		10	9.64E-01	11	6.94E-01	12	2.89E-01	-1			
103	391070	1	6.38E-04	2	3.19E-04	3	4.78E-04	4	7.97E-04	5	9.57E-04
		6	3.31E-03	7	1.36E-02	8	2.36E-02	9	5.97E-02	10	1.06E-01
		11	2.01E-01	12	2.07E-01	13	1.91E-01	14	1.56E-01	15	1.90E-01
		16	1.02E-01	17	8.83E-03	18	4.94E-04	-1			
103	401070	1	6.02E-04	2	3.01E-04	3	4.51E-04	4	7.52E-04	5	9.02E-04
		6	3.12E-03	7	1.29E-02	8	2.22E-02	9	5.63E-02	10	9.99E-02
		11	1.88E-01	12	1.86E-01	13	1.64E-01	14	1.26E-01	15	1.39E-01
		16	6.35E-02	17	3.96E-03	18	5.80E-05	-1			
103	411070	1	5.17E-04	2	2.59E-04	3	3.88E-04	4	6.47E-04	5	7.76E-04
		6	2.68E-03	7	1.11E-02	8	1.91E-02	9	4.84E-02	10	8.59E-02
		11	1.61E-01	12	1.56E-01	13	1.36E-01	14	1.05E-01	15	1.14E-01
		16	4.98E-02	17	2.66E-03	-1					
103	421070	1	6.19E-04	2	3.10E-04	3	4.64E-04	4	7.74E-04	5	9.29E-04
		6	3.21E-03	7	1.32E-02	8	2.29E-02	9	5.79E-02	10	1.03E-01
		11	1.91E-01	12	1.63E-01	13	1.12E-01	14	7.31E-02	15	6.62E-02
		16	1.47E-02	17	4.14E-09	-1					
103	431070	1	1.30E-02	2	2.56E-03	3	1.41E-03	4	6.31E-04	5	4.51E-03
		6	1.08E-01	7	6.45E-02	8	5.67E-02	9	1.09E-01	10	1.01E-01
		11	1.77E-01	12	1.38E-01	13	9.85E-02	14	7.16E-02	15	7.61E-02
		16	1.92E-02	-1							
103	441070	1	1.60E-03	2	1.26E-02	3	4.64E-04	4	2.92E-03	5	1.12E-03
		6	5.69E-03	7	9.97E-02	8	6.84E-02	9	1.13E-01	10	1.72E-01
		11	2.09E-01	12	4.77E-02	13	2.86E-03	14	2.30E-04	15	2.23E-07
		-1									
103	451070	1	2.27E-04	2	2.83E-03	5	5.90E-04	6	5.40E-03	7	3.13E-02
		8	8.71E-01	9	4.17E-02	10	2.67E-03	11	7.40E-04	-1	

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103	461071	1	1.62E-02	2	1.93E-01	7	6.87E-01	-1		
103	401080	1	4.63E-04	2	2.32E-04	3	3.47E-04	4	5.79E-04	5 6.95E-04
		6	2.40E-03	7	9.90E-03	8	1.71E-02	9	4.34E-02	10 7.69E-02
		11	1.43E-01	12	1.29E-01	13	1.04E-01	14	7.40E-02	15 7.62E-02
		16	2.95E-02	17	8.34E-04	-1				
103	411080	1	6.93E-04	2	3.46E-04	3	5.19E-04	4	8.66E-04	5 1.04E-03
		6	3.59E-03	7	1.48E-02	8	2.56E-02	9	6.48E-02	10 1.15E-01
		11	2.19E-01	12	2.30E-01	13	2.14E-01	14	1.74E-01	15 2.12E-01
		16	1.14E-01	17	9.42E-03	18	4.76E-04	-1		
103	421080	1	5.41E-01	2	1.12E-01	3	3.65E-04	4	5.28E-02	5 4.15E-02
		6	2.63E-02	7	2.01E-01	8	1.15E-01	9	8.65E-02	10 8.08E-02
		11	1.48E-01	12	1.19E-01	13	8.49E-02	14	5.44E-02	15 4.72E-02
		16	7.32E-03	-1						
103	431080	1	6.38E-04	2	3.19E-04	3	4.79E-04	4	7.98E-04	5 9.57E-04
		6	3.31E-03	7	8.61E-01	8	7.20E-02	9	2.58E-01	10 3.93E-01
		11	3.94E-01	12	3.67E-01	13	2.30E-01	14	1.27E-01	15 9.75E-02
		16	5.44E-03	17	1.35E-07	-1				
103	441080	5	3.53E-02	7	3.58E-01	-1				
103	451080	1	4.62E-04	2	2.31E-04	3	3.46E-04	4	5.77E-04	5 6.92E-04
		6	2.39E-03	7	9.87E-03	8	1.61E-01	9	4.32E-02	10 7.66E-02
		11	1.42E-01	12	1.28E-01	13	1.15E-01	14	7.90E-02	15 4.61E-02
		16	3.29E-03	-1						
103	451081	8	1.25E+00	9	1.00E+00	10	1.00E+00	11	1.32E-01	13 2.63E-01
		-1								
103	471080	1	1.35E-03	2	1.82E-02	8	4.99E-03	9	2.32E-02	12 1.05E-05
		-1								
103	471081	1	5.34E-02	2	6.50E-01	5	6.63E+00	8	9.05E-01	9 8.98E-01
		10	9.08E-01	-1						
103	401090	1	6.60E-04	2	3.30E-04	3	4.95E-04	4	8.25E-04	5 9.90E-04
		6	3.42E-03	7	1.41E-02	8	2.44E-02	9	6.18E-02	10 1.10E-01
		11	2.07E-01	12	2.11E-01	13	1.92E-01	14	1.53E-01	15 1.80E-01
		16	9.04E-02	17	6.93E-03	18	3.09E-04	-1		
103	411090	1	5.96E-04	2	2.98E-04	3	4.47E-04	4	7.45E-04	5 8.94E-04
		6	3.09E-03	7	1.27E-02	8	2.20E-02	9	5.58E-02	10 9.89E-02
		11	1.87E-01	12	1.86E-01	13	1.66E-01	14	1.29E-01	15 1.46E-01
		16	6.87E-02	17	4.60E-03	18	1.19E-04	-1		
103	421090	1	5.52E-04	2	2.76E-04	3	4.14E-04	4	6.90E-04	5 8.28E-04
		6	2.86E-03	7	1.18E-02	8	2.04E-02	9	5.17E-02	10 9.17E-02
		11	1.72E-01	12	1.66E-01	13	1.44E-01	14	1.08E-01	15 1.15E-01
		16	4.89E-02	17	2.33E-03	-1				
103	431090	1	6.71E-04	2	3.35E-04	3	5.03E-04	4	8.39E-04	5 1.01E-03
		6	3.48E-03	7	1.43E-02	8	2.48E-02	9	6.28E-02	10 1.11E-01
		11	1.99E-01	12	1.46E-01	13	9.50E-02	14	5.36E-02	15 2.91E-02
		16	4.58E-07	-1						
103	441090	1	7.70E-03	2	9.74E-02	3	4.64E-03	4	3.13E-02	6 8.29E-02
		7	5.79E-01	8	2.95E-01	9	1.21E-01	10	1.48E-01	11 2.50E-01
		12	4.97E-01	13	1.95E-02	-1				
103	451090	1	8.19E-03	2	1.06E-01	3	1.21E-02	4	7.08E-04	5 6.64E-03
		6	5.85E-02	7	2.76E-01	8	6.03E-01	9	1.90E-02	10 1.42E-02
		11	2.75E-02	12	1.37E-02	13	5.09E-03	-1		
103	461090	2	4.12E-05	3	5.49E-06	4	5.49E-06	8	5.42E-04	9 4.25E-04
		10	1.77E-04	11	6.10E-07	-1				
103	461091	1	2.28E-02	2	2.64E-01	7	5.59E-01	-1		
103	471091	1	1.89E-02	2	1.23E-01	5	3.56E-01	-1		
103	481090	1	5.44E-02	2	6.75E-01	-1				
103	411100	1	7.66E-04	2	3.83E-04	3	5.75E-04	4	9.58E-04	5 1.15E-03
		6	3.98E-03	7	1.64E-02	8	2.83E-02	9	7.17E-02	10 1.27E-01
		11	2.43E-01	12	2.60E-01	13	2.48E-01	14	2.06E-01	15 2.61E-01
		16	1.50E-01	17	1.41E-02	18	8.99E-04	-1		

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103	421100	1	4.53E-04	2	2.27E-04	3	3.40E-04	4	5.67E-04	5	6.80E-04
		6	2.35E-03	7	9.69E-03	8	1.68E-02	9	4.24E-02	10	7.53E-02
		11	1.39E-01	12	1.20E-01	13	9.14E-02	14	6.24E-02	15	6.05E-02
		16	1.99E-02	17	3.36E-08	-1					
103	431100	1	6.14E-04	2	3.07E-04	3	4.60E-04	4	7.67E-04	5	9.21E-04
		6	3.18E-03	7	5.23E-01	8	1.44E-01	9	2.04E-01	10	1.21E-01
		11	2.46E-01	12	2.01E-01	13	1.44E-01	14	1.01E-01	15	9.85E-02
		16	3.56E-02	17	5.17E-04	-1					
103	441100	1	4.03E-03	2	5.32E-02	3	3.23E-04	4	2.71E-03	5	3.09E-03
		6	1.43E-01	7	1.27E-02	8	1.82E-02	9	4.14E-02	10	7.15E-02
		11	1.42E-01	12	1.52E-01	13	1.87E-02	-1			
103	451100	1	4.61E-04	2	2.30E-04	3	3.46E-04	4	5.76E-04	5	6.91E-04
		6	2.39E-03	7	9.85E-03	8	2.54E-01	9	4.89E-02	10	1.10E-01
		11	1.43E-01	12	1.12E-01	13	8.67E-02	14	6.68E-02	15	3.14E-02
		16	7.78E-09	-1							
103	451101	8	1.30E+00	9	9.65E-01	10	6.85E-01	11	3.13E-01	12	1.89E-01
		-1									
103	471100	1	1.60E-04	2	2.20E-03	7	7.64E-05	9	4.50E-02	10	4.72E-04
		11	2.38E-04	12	1.39E-04	13	3.60E-05	-1			
103	471101	1	1.41E-02	2	7.07E-03	6	9.02E-04	7	1.86E-03	8	3.96E-02
		9	1.14E+00	10	1.57E+00	11	2.85E-01	12	1.40E-01	13	1.03E-05
		-1									
103	411110	1	6.21E-04	2	3.11E-04	3	4.66E-04	4	7.77E-04	5	9.32E-04
		6	3.22E-03	7	1.33E-02	8	2.30E-02	9	5.81E-02	10	1.03E-01
		11	1.95E-01	12	1.98E-01	13	1.80E-01	14	1.45E-01	15	1.72E-01
		16	8.75E-02	17	6.87E-03	18	3.04E-04	-1			
103	421110	1	6.27E-04	2	3.14E-04	3	4.71E-04	4	7.84E-04	5	9.41E-04
		6	3.26E-03	7	1.34E-02	8	2.32E-02	9	5.87E-02	10	1.04E-01
		11	1.97E-01	12	1.96E-01	13	1.75E-01	14	1.37E-01	15	1.57E-01
		16	7.50E-02	17	5.17E-03	18	1.41E-04	-1			
103	431110	1	4.74E-04	2	2.37E-04	3	3.55E-04	4	5.92E-04	5	7.11E-04
		6	2.46E-03	7	1.01E-02	8	1.75E-02	9	4.43E-02	10	7.87E-02
		11	1.47E-01	12	1.38E-01	13	1.18E-01	14	8.78E-02	15	8.99E-02
		16	3.43E-02	17	9.40E-04	-1					
103	441110	1	3.69E-04	2	1.85E-04	3	2.77E-04	4	4.62E-04	5	5.54E-04
		6	1.92E-03	7	7.90E-03	8	1.37E-02	9	3.46E-02	10	6.14E-02
		11	1.14E-01	12	1.02E-01	13	8.46E-02	14	5.85E-02	15	4.92E-02
		16	1.05E-02	-1							
103	451110	1	2.08E-03	2	1.04E-03	3	1.56E-03	4	2.60E-03	5	3.12E-03
		6	1.08E-02	7	4.44E-02	8	7.68E-02	9	1.94E-01	10	3.45E-01
		11	3.89E-01	12	1.39E-04	13	1.03E-04	14	6.46E-05	15	1.69E-05
		-1									
103	461110	1	5.20E-04	2	6.72E-03	5	7.96E-03	6	5.00E-05	7	1.98E-03
		8	7.68E-03	9	2.76E-02	10	6.72E-03	11	1.45E-02	12	7.76E-04
		-1									
103	461111	1	2.19E-02	2	2.50E-01	5	8.22E-02	6	3.80E-03	7	3.57E-01
		8	1.07E-01	9	1.48E-01	10	5.08E-02	11	4.13E-02	12	3.60E-02
		13	4.80E-04	-1							
103	471110	1	1.79E-04	2	2.20E-03	5	2.00E-03	7	1.24E-02	8	6.68E-02
		9	3.35E-04	10	1.12E-04	-1					
103	471111	1	4.85E-02	2	1.90E-01	4	5.31E-03	7	4.65E-03	8	9.10E-04
		9	1.19E-03	10	3.10E-04	-1					
103	481111	1	4.40E-02	2	3.99E-01	7	1.23E+00	-1			
103	411120	1	7.89E-04	2	3.94E-04	3	5.92E-04	4	9.86E-04	5	1.18E-03
		6	4.09E-03	7	1.69E-02	8	2.92E-02	9	7.38E-02	10	1.31E-01
		11	2.50E-01	12	2.72E-01	13	2.63E-01	14	2.24E-01	15	2.95E-01
		16	1.83E-01	17	1.98E-02	18	1.49E-03	-1			
103	421120	1	4.63E-04	2	2.32E-04	3	3.47E-04	4	5.79E-04	5	6.95E-04
		6	2.40E-03	7	9.90E-03	8	1.71E-02	9	4.33E-02	10	7.69E-02

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		11 1.43E-01	12 1.29E-01	13 1.04E-01	14 7.46E-02	15 7.79E-02
		16 3.10E-02	17 9.12E-04	-1		
103	431120	1 6.51E-04	2 3.25E-04	3 4.88E-04	4 8.13E-04	5 9.76E-04
		6 3.37E-03	7 1.39E-02	8 2.40E-02	9 6.09E-02	10 1.08E-01
		11 2.05E-01	12 2.12E-01	13 1.95E-01	14 1.57E-01	15 1.87E-01
		16 9.85E-02	17 7.57E-03	18 3.10E-04	-1	
103	441120	1 4.84E-04	2 2.42E-04	3 3.63E-04	4 6.05E-04	5 7.26E-04
		6 2.51E-03	7 1.03E-02	8 1.79E-02	9 4.53E-02	10 8.04E-02
		11 1.46E-01	12 1.06E-01	13 6.55E-02	14 3.18E-02	15 6.70E-03
		-1				
103	451120	1 4.16E-04	2 2.08E-04	3 3.12E-04	4 5.20E-04	5 6.24E-04
		6 2.16E-03	7 8.89E-03	8 1.61E-01	9 4.39E-02	10 9.68E-02
		11 1.29E-01	12 1.18E-01	13 9.03E-02	14 5.85E-02	15 5.71E-02
		16 1.52E-02	17 1.24E-13	-1		
103	461120	1 3.06E-01	-1			
103	471120	6 9.03E-04	7 4.30E-04	8 2.06E-03	9 5.04E-01	10 2.48E-02
		11 9.27E-02	12 5.80E-02	13 3.78E-02	14 2.08E-02	15 4.30E-05
		-1				
103	421130	1 6.52E-04	2 3.26E-04	3 4.89E-04	4 8.15E-04	5 9.78E-04
		6 3.38E-03	7 1.39E-02	8 2.41E-02	9 6.10E-02	10 1.08E-01
		11 2.05E-01	12 2.09E-01	13 1.92E-01	14 1.56E-01	15 1.89E-01
		16 1.01E-01	17 8.55E-03	18 4.36E-04	-1	
103	431130	1 5.29E-04	2 2.65E-04	3 3.97E-04	4 6.62E-04	5 7.94E-04
		6 2.75E-03	7 1.13E-02	8 1.96E-02	9 4.95E-02	10 8.79E-02
		11 1.65E-01	12 1.59E-01	13 1.39E-01	14 1.06E-01	15 1.12E-01
		16 4.86E-02	17 2.44E-03	-1		
103	441130	1 8.60E-03	2 1.18E-01	3 3.74E-04	4 6.23E-04	5 8.17E-02
		6 2.59E-03	7 5.62E-01	8 2.00E-01	9 2.28E-01	10 1.27E-01
		11 1.56E-01	12 1.22E-01	13 8.47E-02	14 5.49E-02	15 4.90E-02
		16 1.12E-02	17 1.73E-09	-1		
103	451130	1 2.87E-02	2 2.77E-01	3 2.74E-03	4 5.37E-04	5 4.01E-02
		6 4.99E-02	7 2.12E-01	8 1.37E-01	9 9.69E-02	10 8.30E-02
		11 1.29E-01	12 9.48E-02	13 5.94E-02	14 3.10E-02	15 1.12E-02
		16 1.11E-07	-1			
103	461130	1 3.87E-02	2 6.93E-02	3 7.42E-04	4 1.11E-03	5 1.73E-02
		6 4.42E-03	7 2.56E-02	8 2.93E-02	9 8.85E-02	10 1.27E-01
		11 2.04E-01	12 9.88E-02	13 4.68E-03	14 1.64E-06	15 1.12E-07
		-1				
103	471130	1 9.20E-04	2 3.13E-03	5 3.70E-04	6 6.60E-04	7 1.17E-01
		8 2.93E-02	9 1.89E-02	10 8.61E-03	11 6.05E-03	-1
103	471131	1 4.64E-02	2 5.88E-02	3 3.27E-04	4 3.27E-04	6 3.15E-02
		7 1.20E-01	8 3.01E-01	9 5.36E-02	10 5.49E-02	-1
103	481131	1 5.40E-05	2 4.24E-04	7 2.30E-04	-1	
103	491131	1 2.39E-02	2 2.44E-01	8 6.42E-01	-1	
103	421140	1 4.67E-04	2 2.34E-04	3 3.51E-04	4 5.84E-04	5 7.01E-04
		6 2.42E-03	7 9.99E-03	8 1.73E-02	9 4.38E-02	10 7.76E-02
		11 1.45E-01	12 1.36E-01	13 1.15E-01	14 8.71E-02	15 9.83E-02
		16 4.52E-02	17 2.71E-03	-1		
103	431140	1 6.95E-04	2 3.48E-04	3 5.21E-04	4 8.69E-04	5 1.04E-03
		6 3.61E-03	7 1.49E-02	8 2.57E-02	9 6.51E-02	10 1.15E-01
		11 2.20E-01	12 2.31E-01	13 2.18E-01	14 1.80E-01	15 2.25E-01
		16 1.26E-01	17 1.14E-02	18 6.36E-04	-1	
103	441140	1 6.54E-03	2 9.42E-02	3 3.27E-04	4 3.17E-02	5 1.45E-02
		6 1.66E-01	7 4.51E-02	8 1.61E-02	9 4.08E-02	10 7.24E-02
		11 1.32E-01	12 1.02E-01	13 6.92E-02	14 4.18E-02	15 3.05E-02
		16 1.02E-03	-1			
103	451140	1 1.21E-03	2 8.78E-03	3 4.27E-04	4 7.12E-04	5 8.54E-04
		6 2.95E-03	7 1.22E-02	8 7.83E-01	9 2.07E-01	10 1.51E-01
		11 1.76E-01	12 1.59E-01	13 1.23E-01	14 7.60E-02	15 6.30E-02

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		16 6.67E-03	17 1.08E-07	-1			
103	461140	1 9.79E-04	2 1.04E-02	3 9.67E-05	4 1.61E-04	5 1.93E-04	
		6 5.07E-02	7 5.47E-02	8 1.99E-02	9 1.21E-02	10 2.14E-02	
		11 2.41E-02	-1				
103	471140	9 2.32E-01	10 1.01E-02	11 3.09E-02	12 2.34E-02	13 8.12E-03	
		14 5.43E-03	15 8.77E-04	-1			
103	491140	1 3.10E-04	2 3.50E-03	9 6.00E-05	11 1.39E-03	-1	
103	491141	1 5.29E-02	2 3.63E-01	7 1.56E-01	9 3.14E-02	10 3.14E-02	
		-1					
103	421150	1 6.31E-04	2 3.15E-04	3 4.73E-04	4 7.88E-04	5 9.46E-04	
		6 3.27E-03	7 1.35E-02	8 2.33E-02	9 5.90E-02	10 1.05E-01	
		11 1.98E-01	12 2.04E-01	13 1.93E-01	14 1.62E-01	15 2.07E-01	
		16 1.23E-01	17 1.25E-02	18 8.34E-04	-1		
103	431150	1 5.67E-04	2 2.83E-04	3 4.25E-04	4 7.08E-04	5 8.50E-04	
		6 2.94E-03	7 1.21E-02	8 2.09E-02	9 5.30E-02	10 9.41E-02	
		11 1.77E-01	12 1.75E-01	13 1.57E-01	14 1.23E-01	15 1.40E-01	
		16 6.75E-02	17 4.65E-03	18 7.49E-05	-1		
103	441150	1 5.40E-04	2 2.70E-04	3 4.05E-04	4 6.76E-04	5 8.11E-04	
		6 2.80E-03	7 1.16E-02	8 2.00E-02	9 5.06E-02	10 8.97E-02	
		11 1.68E-01	12 1.61E-01	13 1.39E-01	14 1.05E-01	15 1.10E-01	
		16 4.59E-02	17 1.87E-03	-1			
103	451150	1 1.19E-02	2 1.56E-01	3 3.36E-04	4 5.60E-04	5 6.71E-04	
		6 4.53E-01	7 2.65E-01	8 6.06E-02	9 4.19E-02	10 7.43E-02	
		11 1.34E-01	12 1.05E-01	13 7.53E-02	14 4.82E-02	15 4.20E-02	
		16 7.72E-03	-1				
103	461150	1 7.37E-04	2 3.68E-04	3 5.52E-04	4 9.21E-04	5 1.10E-03	
		6 3.82E-03	7 1.57E-02	8 2.72E-02	9 6.89E-02	10 1.22E-01	
		11 2.22E-01	12 1.67E-01	13 1.09E-01	14 6.20E-02	15 3.41E-02	
		16 1.23E-07	-1				
103	471150	1 1.60E-03	2 1.87E-02	6 2.95E-02	7 2.40E-01	8 5.98E-02	
		9 1.16E-01	10 2.96E-02	11 4.14E-02	12 7.60E-02	13 5.38E-02	
		14 3.08E-03	-1				
103	471151	1 1.03E-02	2 1.33E-02	3 7.35E-05	4 7.35E-05	6 5.73E-01	
		7 7.06E-01	8 4.57E-01	9 1.05E-01	10 4.07E-02	-1	
103	481150	1 3.25E-03	2 3.42E-02	3 4.21E-03	7 2.77E-02	9 3.55E-01	
		10 2.48E-05	-1				
103	481151	2 1.02E-04	6 4.42E-05	8 1.20E-06	9 9.78E-05	10 2.00E-02	
		11 1.76E-04	-1				
103	491151	1 3.34E-02	2 3.37E-01	8 4.59E-01	9 4.70E-06	-1	
103	431160	1 6.83E-04	2 3.42E-04	3 5.13E-04	4 8.54E-04	5 1.03E-03	
		6 3.54E-03	7 1.46E-02	8 2.53E-02	9 6.40E-02	10 1.13E-01	
		11 2.16E-01	12 2.29E-01	13 2.20E-01	14 1.87E-01	15 2.45E-01	
		16 1.51E-01	17 1.60E-02	18 1.11E-03	-1		
103	441160	1 4.38E-04	2 2.19E-04	3 3.29E-04	4 5.48E-04	5 6.57E-04	
		6 2.27E-03	7 9.37E-03	8 1.62E-02	9 4.10E-02	10 7.28E-02	
		11 1.34E-01	12 1.10E-01	13 8.03E-02	14 5.26E-02	15 4.80E-02	
		16 1.06E-02	-1				
103	451160	1 1.02E-03	2 6.58E-03	3 4.19E-04	4 6.98E-04	5 8.37E-04	
		6 2.90E-03	7 1.19E-02	8 6.33E-01	9 5.23E-02	10 2.10E-01	
		11 1.74E-01	12 1.67E-01	13 1.46E-01	14 1.10E-01	15 1.20E-01	
		16 5.12E-02	17 2.68E-03	18 1.02E-10	-1		
103	461160	1 1.11E-02	2 1.08E-01	3 7.07E-04	4 1.18E-03	5 3.43E-02	
		6 3.64E-01	7 1.02E-01	8 4.82E-02	9 8.82E-02	10 1.57E-01	
		11 2.52E-01	12 1.53E-02	13 7.79E-06	-1		
103	471160	1 4.49E-04	2 2.24E-04	3 3.37E-04	4 4.36E-03	5 6.73E-04	
		6 2.33E-03	7 9.59E-03	8 2.12E-02	9 9.69E-01	10 1.99E-01	
		11 3.75E-01	12 1.31E-01	13 2.25E-01	14 1.91E-01	15 1.10E-02	
		16 1.30E-06	17 1.05E-12	-1			
103	471161	1 4.10E-03	2 1.74E-02	3 9.73E-04	4 1.62E-03	5 5.50E-02	

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		6 2.44E-02	7 1.43E-01	8 4.80E-02	9 1.17E+00	10 1.22E+00
		11 7.11E-01	12 1.37E-01	13 1.48E-02	14 1.23E-06	15 1.26E-06
		16 5.93E-07	17 2.43E-09	-1		
103	491160	9 2.55E-03	10 2.73E-04	11 1.36E-02	13 2.64E-04	14 1.17E-05
		-1				
103	491161	1 9.50E-04	2 9.59E-03	5 1.69E-04	6 3.35E-02	7 4.95E-03
		8 2.87E-01	9 1.35E-02	10 1.27E-01	11 1.41E+00	12 1.24E-01
		13 1.56E-01	-1			
103	431170	1 5.51E-04	2 2.75E-04	3 4.13E-04	4 6.89E-04	5 8.26E-04
		6 2.86E-03	7 1.18E-02	8 2.04E-02	9 5.16E-02	10 9.15E-02
		11 1.72E-01	12 1.72E-01	13 1.60E-01	14 1.32E-01	15 1.62E-01
		16 9.03E-02	17 8.22E-03	18 3.22E-04	-1	
103	441170	1 5.47E-04	2 2.73E-04	3 4.10E-04	4 6.83E-04	5 8.20E-04
		6 2.84E-03	7 1.17E-02	8 2.02E-02	9 5.12E-02	10 9.08E-02
		11 1.70E-01	12 1.66E-01	13 1.48E-01	14 1.15E-01	15 1.30E-01
		16 6.21E-02	17 3.78E-03	-1		
103	451170	1 5.02E-04	2 2.51E-04	3 3.77E-04	4 6.28E-04	5 7.54E-04
		6 2.61E-03	7 1.07E-02	8 1.86E-02	9 4.70E-02	10 8.34E-02
		11 1.55E-01	12 1.33E-01	13 1.04E-01	14 7.37E-02	15 7.55E-02
		16 2.84E-02	17 3.20E-04	-1		
103	461170	1 4.90E-04	2 2.45E-04	3 3.68E-04	4 6.13E-04	5 7.36E-04
		6 2.54E-03	7 1.05E-02	8 1.81E-02	9 4.59E-02	10 8.14E-02
		11 1.50E-01	12 1.22E-01	13 8.88E-02	14 5.79E-02	15 5.22E-02
		16 1.09E-02	-1			
103	471170	1 4.80E-03	2 5.57E-02	6 2.50E-01	7 9.57E-02	8 2.94E-01
		9 6.65E-02	10 5.63E-02	11 5.24E-02	12 2.15E-01	13 1.81E-01
		14 6.95E-02	15 9.66E-03	-1		
103	471171	1 1.27E-02	2 1.12E-01	6 5.65E-01	7 4.76E-01	8 7.60E-01
		9 3.44E-01	10 7.64E-02	11 7.59E-02	12 3.08E-03	-1
103	481170	1 5.80E-03	2 5.48E-02	5 3.65E-02	6 5.58E-04	7 3.03E-01
		8 2.87E-01	9 1.59E-02	10 1.29E-01	11 3.76E-01	12 1.78E-01
		13 1.73E-03	-1			
103	481171	5 1.15E-02	6 7.86E-04	7 1.07E-02	8 4.30E-02	9 2.18E-01
		10 2.19E-01	11 6.48E-01	12 2.75E-01	13 1.77E-01	14 1.49E-03
		-1				
103	491170	1 1.00E-02	2 1.01E-01	7 8.70E-01	8 1.74E-03	9 1.00E+00
		-1				
103	491171	1 1.63E-02	2 1.98E-01	7 1.59E-01	8 1.91E-01	10 2.10E-04
		11 1.30E-04	-1			
103	501171	1 7.90E-02	2 6.59E-01	7 8.85E-01	-1	
103	431180	1 6.62E-04	2 3.31E-04	3 4.97E-04	4 8.28E-04	5 9.93E-04
		6 3.43E-03	7 1.42E-02	8 2.45E-02	9 6.20E-02	10 1.10E-01
		11 2.09E-01	12 2.23E-01	13 2.20E-01	14 1.94E-01	15 2.71E-01
		16 1.89E-01	17 2.46E-02	18 2.25E-03	-1	
103	441180	1 4.23E-04	2 2.12E-04	3 3.18E-04	4 5.29E-04	5 6.35E-04
		6 2.20E-03	7 9.05E-03	8 1.57E-02	9 3.96E-02	10 7.03E-02
		11 1.30E-01	12 1.12E-01	13 8.66E-02	14 6.09E-02	15 6.23E-02
		16 2.16E-02	-1			
103	451180	1 5.65E-04	2 2.82E-04	3 4.24E-04	4 7.06E-04	5 8.47E-04
		6 2.93E-03	7 1.21E-02	8 2.09E-02	9 5.29E-02	10 9.38E-02
		11 1.77E-01	12 1.81E-01	13 1.68E-01	14 1.36E-01	15 1.68E-01
		16 9.62E-02	17 7.90E-03	18 2.54E-04	-1	
103	461180	1 5.03E-02	2 5.81E-01	3 5.87E-02	4 6.55E-02	5 5.94E-02
		6 5.55E-01	7 4.51E-01	8 2.10E-01	9 9.20E-02	10 4.78E-02
		11 8.64E-02	12 6.30E-02	13 3.84E-02	14 1.72E-02	15 2.11E-03
		-1				
103	471180	8 4.37E-03	9 9.21E-01	10 9.23E-02	11 4.86E-02	12 3.16E-02
		13 4.36E-02	14 1.69E-01	15 9.07E-02	-1	
103	471181	1 1.97E-02	2 1.67E-01	3 4.41E-04	4 7.36E-04	5 8.83E-04

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		6	1.51E+00	7	3.25E-02	8	4.24E-02	9	3.09E-01	10	1.76E-01
		11	2.57E-01	12	1.44E-01	13	1.59E-01	14	1.21E-01	15	7.72E-02
		16	1.24E-06	17	5.76E-08	-1					
103	481180	1	7.72E-04	2	3.86E-04	3	5.79E-04	4	9.65E-04	5	1.16E-03
		6	4.25E-03	7	1.78E-02	8	2.59E-02	9	2.57E-02	10	3.45E-08
		-1									
103	491180	9	7.00E-03	10	2.30E-03	11	5.53E-02	12	1.30E-03	13	1.05E-03
		-1									
103	491181	1	2.31E-04	2	2.33E-03	7	3.51E-02	8	5.57E-02	9	6.20E-01
		10	5.41E-02	11	1.87E+00	12	2.02E-02	13	4.50E-02	14	2.39E-03
		15	1.92E-04	-1							
103	441190	1	5.51E-04	2	2.76E-04	3	4.13E-04	4	6.89E-04	5	8.27E-04
		6	2.86E-03	7	1.18E-02	8	2.04E-02	9	5.16E-02	10	9.15E-02
		11	1.72E-01	12	1.71E-01	13	1.57E-01	14	1.27E-01	15	1.54E-01
		16	8.52E-02	17	7.39E-03	18	1.46E-04	-1			
103	451190	1	4.55E-04	2	2.28E-04	3	3.42E-04	4	5.69E-04	5	6.83E-04
		6	2.36E-03	7	9.74E-03	8	1.68E-02	9	4.26E-02	10	7.56E-02
		11	1.41E-01	12	1.34E-01	13	1.19E-01	14	9.30E-02	15	1.01E-01
		16	4.57E-02	17	1.76E-03	-1					
103	461190	1	5.07E-04	2	2.53E-04	3	3.80E-04	4	6.33E-04	5	7.60E-04
		6	2.63E-03	7	1.08E-02	8	1.87E-02	9	4.74E-02	10	8.41E-02
		11	1.58E-01	12	1.44E-01	13	1.05E-01	14	7.16E-02	15	7.16E-02
		16	2.29E-02	17	1.21E-12	-1					
103	471190	1	4.86E-02	2	5.79E-01	4	6.89E-02	5	2.52E-02	7	1.97E-01
		8	3.60E-01	9	4.46E-01	10	1.86E-01	11	1.98E-01	12	1.14E-01
		13	1.35E-01	14	9.83E-02	-1					
103	481190	1	2.96E-03	2	3.09E-02	4	3.61E-03	6	7.51E-02	7	3.77E-01
		8	2.13E-01	9	1.95E-02	10	1.31E-01	11	2.80E-01	12	3.76E-01
		13	1.10E-01	14	3.12E-02	-1					
103	481191	1	9.80E-04	2	1.06E-02	4	2.03E-05	5	7.69E-03	6	3.28E-02
		7	1.89E-02	8	1.44E-01	9	7.51E-02	10	3.26E-01	11	7.83E-01
		12	1.12E-01	13	3.49E-01	14	2.80E-02	-1			
103	491190	1	5.32E-02	2	1.61E-01	9	4.86E-03	10	9.92E-01	11	4.56E-03
		-1									
103	491191	1	2.37E-03	2	2.25E-02	3	5.08E-05	4	8.46E-05	5	1.02E-04
		6	3.51E-04	7	1.45E-03	8	3.72E-03	9	6.34E-03	10	1.16E-02
		11	2.43E-02	12	2.10E-02	13	1.66E-02	14	1.49E-03	-1	
103	501191	1	1.19E-01	2	5.86E-01	4	1.98E-04	-1			
103	441200	1	4.15E-04	2	2.07E-04	3	3.11E-04	4	5.19E-04	5	6.22E-04
		6	2.15E-03	7	8.87E-03	8	1.53E-02	9	3.88E-02	10	6.89E-02
		11	1.28E-01	12	1.14E-01	13	9.27E-02	14	6.88E-02	15	7.65E-02
		16	3.41E-02	17	5.44E-04	-1					
103	451200	1	5.71E-04	2	2.85E-04	3	4.28E-04	4	7.14E-04	5	8.56E-04
		6	2.96E-03	7	1.22E-02	8	2.11E-02	9	5.34E-02	10	9.48E-02
		11	1.79E-01	12	1.85E-01	13	1.77E-01	14	1.50E-01	15	1.96E-01
		16	1.25E-01	17	1.31E-02	18	7.26E-04	-1			
103	461200	1	4.43E-04	2	2.21E-04	3	3.32E-04	4	5.53E-04	5	6.64E-04
		6	2.30E-03	7	9.46E-03	8	1.64E-02	9	4.14E-02	10	7.35E-02
		11	1.34E-01	12	1.03E-01	13	7.14E-02	14	4.37E-02	15	2.77E-02
		-1									
103	471200	1	6.18E-04	2	3.09E-04	3	4.63E-04	4	7.72E-04	5	9.27E-04
		6	3.20E-03	7	1.32E-02	8	2.28E-02	9	1.07E+00	10	2.13E-01
		11	2.81E-01	12	1.77E-01	13	1.52E-01	14	1.20E-01	15	1.40E-01
		16	5.87E-02	17	1.06E-03	-1					
103	481200	1	2.02E-04	2	1.01E-04	3	1.51E-04	4	2.52E-04	5	3.02E-04
		6	1.05E-03	7	4.31E-03	8	7.45E-03	9	1.89E-02	10	3.35E-02
		11	5.63E-02	12	8.68E-03	-1					
103	491200	1	3.40E-04	2	1.70E-04	3	2.55E-04	4	4.25E-04	5	5.10E-04
		6	1.76E-03	7	8.54E-03	8	1.26E-02	9	3.18E-02	10	6.69E-02



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		11 2.38E-01	12 7.37E-02	13 6.08E-02	14 6.57E-03	15 1.97E-07
		16 9.90E-08	-1			
103	491201	5 7.80E-01	7 9.24E-01	8 1.31E-01	9 3.12E-01	10 5.95E-01
		11 2.03E+00	-1			
103	451210	1 4.72E-04	2 2.36E-04	3 3.54E-04	4 5.89E-04	5 7.07E-04
		6 2.45E-03	7 1.01E-02	8 1.74E-02	9 4.41E-02	10 7.83E-02
		11 1.47E-01	12 1.41E-01	13 1.28E-01	14 1.05E-01	15 1.23E-01
		16 6.37E-02	17 4.30E-03	-1		
103	461210	1 4.65E-04	2 2.33E-04	3 3.49E-04	4 5.82E-04	5 6.98E-04
		6 2.41E-03	7 9.94E-03	8 1.72E-02	9 4.35E-02	10 7.73E-02
		11 1.44E-01	12 1.37E-01	13 1.23E-01	14 9.42E-02	15 1.03E-01
		16 4.79E-02	17 1.49E-03	-1		
103	471210	1 8.82E-03	2 2.58E-02	3 4.02E-04	4 1.47E-03	5 8.04E-04
		6 5.99E-02	7 6.86E-02	8 7.69E-01	9 2.31E-01	10 3.02E-01
		11 3.85E-01	12 3.06E-01	13 1.13E-01	14 5.97E-02	15 6.83E-04
		16 4.96E-06	-1			
103	481210	1 1.18E-03	2 1.27E-02	7 6.68E-02	8 7.01E-01	9 1.49E-01
		10 1.51E-01	11 5.95E-01	12 2.99E-01	13 2.48E-03	-1
103	491210	1 1.30E-03	2 7.14E-03	3 1.10E-04	4 2.22E-03	5 2.19E-04
		6 7.59E-04	7 6.63E-02	8 5.41E-03	9 7.05E-02	10 7.65E-01
		11 4.72E-02	12 3.80E-02	13 3.43E-02	14 2.72E-02	15 7.34E-03
		-1				
103	491211	1 3.71E-02	2 3.76E-01	4 2.04E-01	8 4.80E-03	10 3.57E-03
		11 2.60E-02	14 2.14E-03	15 1.02E-03	-1	
103	501211	1 5.46E-02	2 1.54E-01	3 1.85E-02	-1	
103	451220	1 5.63E-04	2 2.82E-04	3 4.22E-04	4 7.04E-04	5 8.45E-04
		6 2.92E-03	7 1.20E-02	8 2.08E-02	9 5.27E-02	10 9.35E-02
		11 1.77E-01	12 1.84E-01	13 1.78E-01	14 1.55E-01	15 2.14E-01
		16 1.49E-01	17 1.87E-02	18 1.39E-03	-1	
103	461220	1 4.13E-04	2 2.07E-04	3 3.10E-04	4 5.17E-04	5 6.20E-04
		6 2.14E-03	7 8.83E-03	8 1.53E-02	9 3.87E-02	10 6.86E-02
		11 1.26E-01	12 1.02E-01	13 7.51E-02	14 5.07E-02	15 4.74E-02
		16 7.13E-03	-1			
103	471220	1 3.82E-04	2 1.91E-04	3 2.87E-04	4 4.78E-04	5 5.73E-04
		6 1.98E-03	7 8.17E-03	8 1.41E-02	9 1.20E+00	10 5.14E-01
		11 1.90E-01	12 1.08E-01	13 9.39E-02	14 7.55E-02	15 9.59E-02
		16 4.68E-02	17 1.36E-03	-1		
103	481220	1 4.25E-04	2 2.13E-04	3 3.19E-04	4 5.32E-04	5 6.38E-04
		6 2.21E-03	7 9.09E-03	8 1.57E-02	9 3.98E-02	10 7.06E-02
		11 1.27E-01	12 8.36E-02	13 2.69E-02	-1	
103	491220	1 6.08E-04	2 3.04E-04	3 4.56E-04	4 7.59E-04	5 9.11E-04
		6 3.15E-03	7 1.30E-02	8 2.51E-02	9 5.69E-02	10 1.06E-01
		11 5.30E-01	12 1.29E-01	13 4.51E-02	14 4.54E-02	15 4.93E-03
		16 2.61E-03	17 1.34E-08	-1		
103	491221	1 7.60E-04	2 7.66E-03	6 5.98E-02	7 1.52E-02	8 4.16E-02
		9 2.09E-02	10 3.33E-01	11 2.11E+00	12 9.71E-02	13 5.53E-02
		14 3.38E-02	-1			
103	511220	1 1.78E-03	2 1.78E-02	9 7.45E-01	10 1.63E-04	11 1.57E-02
		12 9.19E-05	-1			
103	511221	1 1.00E-01	2 3.09E-01	4 5.54E-01	5 1.36E-03	-1
103	451230	1 4.69E-04	2 2.35E-04	3 3.52E-04	4 5.86E-04	5 7.04E-04
		6 2.43E-03	7 1.00E-02	8 1.73E-02	9 4.39E-02	10 7.79E-02
		11 1.46E-01	12 1.43E-01	13 1.34E-01	14 1.14E-01	15 1.46E-01
		16 9.15E-02	17 9.77E-03	18 1.47E-04	-1	
103	461230	1 4.71E-04	2 2.36E-04	3 3.54E-04	4 5.89E-04	5 7.07E-04
		6 2.45E-03	7 1.01E-02	8 1.74E-02	9 4.41E-02	10 7.83E-02
		11 1.46E-01	12 1.40E-01	13 1.29E-01	14 1.04E-01	15 1.23E-01
		16 6.59E-02	17 4.01E-03	-1		
103	471230	1 6.05E-03	2 6.22E-02	3 3.37E-04	4 5.62E-04	5 6.75E-04

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		6	1.36E-01	7	3.89E-01	8	3.09E-01	9	2.76E-01	10	1.19E-01
		11	2.29E-01	12	2.25E-01	13	1.19E-01	14	1.22E-01	15	2.44E-02
		16	4.70E-06	17	2.98E-07	-1					
103	481230	1	6.20E-04	2	6.86E-03	7	3.14E-02	8	6.06E-01	9	6.85E-02
		10	2.12E-01	11	6.47E-01	12	3.69E-01	13	6.17E-02	-1	
103	491230	1	1.16E-04	2	1.17E-03	7	5.79E-03	8	1.61E-03	9	3.33E-02
		10	1.90E-02	11	9.14E-01	13	2.57E-03	-1			
103	491231	1	8.40E-03	2	8.50E-02	6	3.84E-01	10	7.49E-04	11	9.60E-04
		13	1.73E-04	14	8.93E-04	15	3.26E-03	-1			
103	501230	7	1.93E-05	11	6.33E-03	-1					
103	501231	1	1.11E-02	2	1.07E-01	7	8.57E-01	8	4.20E-04	9	3.00E-04
		-1									
103	521230	1	6.06E-02	2	1.55E-03	-1					
103	521231	1	9.30E-02	2	4.22E-01	3	9.50E-02	5	9.24E-04	7	8.40E-01
		-1									
103	461240	1	3.86E-04	2	1.93E-04	3	2.90E-04	4	4.83E-04	5	5.80E-04
		6	2.00E-03	7	8.26E-03	8	1.43E-02	9	3.62E-02	10	6.42E-02
		11	1.18E-01	12	1.01E-01	13	7.99E-02	14	5.85E-02	15	6.47E-02
		16	2.34E-02	-1							
103	471240	1	5.03E-04	2	2.51E-04	3	3.77E-04	4	6.28E-04	5	7.54E-04
		6	2.61E-03	7	1.07E-02	8	1.86E-02	9	4.70E-02	10	8.34E-02
		11	1.57E-01	12	1.60E-01	13	1.53E-01	14	1.32E-01	15	1.81E-01
		16	1.27E-01	17	1.52E-02	18	7.52E-04	-1			
103	481240	1	4.13E-02	2	4.49E-01	3	3.10E-02	4	1.54E-01	5	4.54E-04
		6	8.78E-02	7	3.41E-01	8	1.12E-02	9	2.83E-02	10	5.03E-02
		11	9.13E-02	12	6.91E-02	13	4.51E-02	14	2.24E-02	15	4.15E-03
		-1									
103	491240	1	3.78E-04	2	6.60E-04	3	2.47E-04	4	4.12E-04	5	4.94E-04
		6	1.71E-03	7	7.04E-03	8	1.64E-02	9	3.78E-02	10	2.09E-01
		11	6.02E-01	12	1.44E-01	13	1.11E-01	14	6.63E-02	15	1.65E-01
		16	1.44E-02	17	3.52E-07	-1					
103	511240	1	4.54E-04	2	3.44E-03	3	7.77E-04	7	4.89E-04	8	5.18E-03
		9	1.06E+00	10	1.76E-01	11	1.01E-01	12	4.83E-01	13	5.87E-02
		14	4.11E-05	-1							
103	511241	1	4.90E-02	9	7.45E-01	11	5.00E-03	-1			
103	461250	1	4.47E-04	2	2.24E-04	3	3.35E-04	4	5.59E-04	5	6.71E-04
		6	2.32E-03	7	9.56E-03	8	1.65E-02	9	4.19E-02	10	7.43E-02
		11	1.39E-01	12	1.34E-01	13	1.27E-01	14	1.09E-01	15	1.42E-01
		16	9.50E-02	17	1.04E-02	-1					
103	471250	1	4.25E-04	2	2.13E-04	3	3.19E-04	4	5.31E-04	5	6.38E-04
		6	2.21E-03	7	9.09E-03	8	1.57E-02	9	3.98E-02	10	7.06E-02
		11	1.32E-01	12	1.25E-01	13	1.17E-01	14	9.95E-02	15	1.24E-01
		16	7.32E-02	17	5.65E-03	-1					
103	481250	7	3.48E-02	8	4.65E-01	9	3.58E-02	10	1.69E-01	11	4.29E-01
		12	2.74E-01	13	3.76E-01	14	6.61E-03	-1			
103	491250	1	6.00E-05	2	6.55E-04	8	2.44E-02	9	7.90E-02	10	1.03E-01
		11	8.05E-01	12	9.30E-03	-1					
103	491251	1	4.88E-03	2	5.01E-02	3	1.34E-04	4	2.23E-04	5	2.67E-04
		6	9.24E-04	7	3.67E-01	8	6.58E-03	9	1.67E-02	10	2.96E-02
		11	5.49E-02	12	5.13E-02	13	4.66E-02	14	3.64E-02	15	3.88E-02
		16	1.55E-02	-1							
103	501250	1	4.30E-05	2	4.28E-04	7	1.91E-03	8	1.76E-02	9	1.62E-02
		10	1.04E-01	11	1.76E-01	12	2.62E-03	13	2.21E-02	-1	
103	501251	1	1.83E-03	2	1.78E-02	7	6.80E-04	8	9.74E-01	9	3.60E-03
		10	8.07E-04	11	1.20E-02	12	2.00E-03	13	1.94E-05	-1	
103	511250	1	5.02E-02	2	3.80E-01	3	1.29E-01	4	2.69E-04	6	2.86E-03
		7	7.63E-02	8	3.20E-01	9	4.65E-01	-1			
103	521251	1	1.52E-01	2	9.41E-01	3	2.80E-01	6	2.74E-03	-1	
103	461260	1	3.51E-04	2	1.76E-04	3	2.63E-04	4	4.39E-04	5	5.27E-04

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		6	1.82E-03	7	7.50E-03	8	1.30E-02	9	3.29E-02	10	5.83E-02
		11	1.08E-01	12	9.50E-02	13	8.09E-02	14	6.50E-02	15	8.42E-02
		16	5.18E-02	17	1.38E-03	-1					
103	471260	1	5.54E-04	2	2.77E-04	3	4.15E-04	4	6.92E-04	5	8.31E-04
		6	2.87E-03	7	1.18E-02	8	2.05E-02	9	5.18E-02	10	9.20E-02
		11	1.73E-01	12	1.74E-01	13	1.71E-01	14	1.54E-01	15	2.31E-01
		16	1.97E-01	17	3.35E-02	18	3.12E-03	-1			
103	481260	1	3.43E-04	2	1.71E-04	3	2.57E-04	4	4.29E-04	5	5.14E-04
		6	1.78E-03	7	7.33E-03	8	1.27E-02	9	3.21E-02	10	5.69E-02
		11	1.04E-01	12	8.30E-02	13	6.15E-02	14	4.17E-02	15	3.48E-02
		16	7.34E-04	-1							
103	491260	7	2.74E-03	8	4.03E-03	9	2.35E-02	10	2.03E-01	11	6.64E-01
		12	8.56E-02	13	1.02E-01	14	4.35E-02	15	3.30E-01	16	4.90E-02
		-1									
103	501260	1	1.90E-01	2	6.71E-01	3	4.50E-03	4	1.78E-01	5	8.30E-01
		-1									
103	511260	1	1.93E-03	2	1.46E-02	3	3.30E-03	6	3.98E-03	7	9.26E-02
		8	8.47E-01	9	2.54E+00	10	8.05E-01	11	4.56E-02	-1	
103	511261	1	1.15E-02	2	1.11E-02	3	2.49E-03	8	8.60E-01	9	1.70E+00
		10	1.29E-02	11	2.67E-02	-1					
103	471270	1	4.03E-04	2	2.02E-04	3	3.03E-04	4	5.04E-04	5	6.05E-04
		6	2.09E-03	7	8.62E-03	8	1.49E-02	9	3.78E-02	10	6.70E-02
		11	1.25E-01	12	1.19E-01	13	1.15E-01	14	1.03E-01	15	1.47E-01
		16	1.17E-01	17	1.86E-02	18	4.16E-04	-1			
103	481270	1	4.80E-04	2	2.40E-04	3	3.60E-04	4	6.00E-04	5	7.20E-04
		6	2.49E-03	7	1.03E-02	8	1.77E-02	9	4.49E-02	10	7.97E-02
		11	1.48E-01	12	1.40E-01	13	1.33E-01	14	1.10E-01	15	1.35E-01
		16	8.22E-02	17	2.87E-03	-1					
103	491270	1	1.12E-04	2	1.80E-04	3	7.61E-05	4	1.27E-04	5	1.52E-04
		6	2.12E-03	7	7.35E-03	8	1.37E-02	9	9.55E-02	10	1.95E-01
		11	1.38E-01	12	4.58E-01	13	3.35E-02	14	2.67E-02	15	2.73E-02
		16	1.51E-02	17	2.65E-04	-1					
103	491271	1	1.53E-03	2	1.31E-02	3	3.08E-04	4	5.13E-04	5	6.16E-04
		6	2.13E-03	7	9.89E-02	8	1.52E-02	9	3.93E-02	10	7.92E-02
		11	1.30E-01	12	1.18E-01	13	1.11E-01	14	9.33E-02	15	1.21E-01
		16	6.55E-02	17	1.76E-03	-1					
103	501270	1	5.70E-03	2	4.86E-02	3	7.99E-04	4	3.06E-03	5	1.10E-02
		6	3.82E-02	7	1.91E-01	8	1.35E-01	9	2.61E-01	10	4.85E-01
		11	7.66E-01	12	4.91E-02	13	8.23E-02	14	5.03E-02	-1	
103	501271	1	3.71E-04	2	1.85E-04	3	2.78E-04	4	4.63E-04	5	5.56E-04
		6	1.92E-03	7	7.92E-03	8	1.37E-02	9	5.83E-01	10	6.15E-02
		11	1.12E-01	12	1.08E-01	13	5.16E-02	14	2.11E-02	15	9.94E-04
		-1									
103	511270	1	4.40E-03	2	3.07E-02	3	7.00E-03	4	1.44E-02	7	1.16E-01
		8	1.01E-01	9	7.72E-01	10	1.84E-01	11	8.50E-03	-1	
103	521270	1	1.22E-04	2	8.80E-04	3	1.99E-04	4	2.97E-04	6	3.27E-05
		7	9.67E-04	8	9.90E-03	9	1.29E-06	-1			
103	521271	1	3.46E-02	2	3.00E-01	3	6.76E-02	4	5.02E-03	5	8.39E-03
		-1									
103	471280	1	4.81E-04	2	2.41E-04	3	3.61E-04	4	6.01E-04	5	7.22E-04
		6	2.50E-03	7	1.03E-02	8	1.78E-02	9	4.50E-02	10	7.99E-02
		11	1.49E-01	12	1.44E-01	13	1.42E-01	14	1.34E-01	15	2.23E-01
		16	2.43E-01	17	6.35E-02	18	1.12E-02	-1			
103	481280	1	3.46E-04	2	1.73E-04	3	2.60E-04	4	4.33E-04	5	5.19E-04
		6	1.80E-03	7	7.40E-03	8	1.28E-02	9	3.24E-02	10	5.75E-02
		11	1.05E-01	12	8.88E-02	13	7.20E-02	14	5.56E-02	15	6.69E-02
		16	2.23E-02	-1							
103	491280	8	8.80E-03	9	1.81E-02	10	9.09E-02	11	6.75E-01	12	1.40E-01
		13	1.14E-01	14	2.42E-02	15	2.85E-01	16	1.40E-01	-1	

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103	501280	1	1.44E-01	2	1.41E+00	3	1.05E-01	4	6.49E-02	5	2.79E-01
		6	1.77E-03	7	6.49E-02	8	1.00E-01	9	9.14E-01	-1	
103	511280	1	2.54E-03	2	1.91E-02	3	4.32E-03	6	1.00E-02	7	5.50E-02
		8	7.25E-01	9	1.43E+00	10	2.29E+00	11	1.91E-01	12	1.70E-02
		-1									
103	511281	1	3.30E-03	7	9.60E-03	8	8.83E-01	9	3.26E-02	10	2.04E+00
		11	4.70E-02	12	7.68E-03	-1					
103	531280	1	5.59E-03	2	4.43E-02	3	1.00E-02	8	1.69E-01	9	1.59E-02
		10	5.69E-03	11	1.03E-04	-1					
103	481290	1	4.24E-04	2	2.12E-04	3	3.18E-04	4	5.30E-04	5	6.36E-04
		6	2.20E-03	7	9.06E-03	8	1.57E-02	9	3.97E-02	10	7.04E-02
		11	1.30E-01	12	1.20E-01	13	1.18E-01	14	1.06E-01	15	1.49E-01
		16	1.25E-01	17	1.46E-02	-1					
103	491290	1	3.40E-05	2	3.42E-04	7	1.82E-02	8	1.34E-02	9	2.94E-02
		10	1.44E-01	11	2.52E-01	12	3.52E-01	13	4.93E-01	14	1.56E-02
		-1									
103	501290	7	1.66E-02	8	3.85E-02	9	9.01E-01	10	1.25E-01	11	1.44E-01
		12	4.90E-02	13	1.92E-02	-1					
103	501291	1	6.87E-04	2	3.43E-04	3	5.15E-04	4	8.59E-04	5	1.03E-03
		6	3.56E-03	7	1.47E-02	8	2.54E-02	9	6.43E-02	10	1.14E-01
		11	2.17E-01	12	2.69E-01	13	2.52E-01	14	1.34E-01	15	8.05E-02
		16	7.20E-07	-1							
103	511290	1	4.80E-04	2	3.65E-03	3	8.20E-04	5	1.72E-03	6	3.87E-03
		7	4.78E-02	8	5.57E-02	9	3.29E-01	10	8.31E-01	11	1.98E-01
		12	1.61E-01	13	1.48E-02	-1					
103	521290	1	6.20E-02	2	1.64E-01	3	2.71E-04	7	1.30E-02	8	5.77E-04
		9	9.31E-02	10	3.27E-03	11	5.23E-03	-1			
103	521291	1	4.91E-02	2	2.33E-01	3	5.30E-02	6	1.47E-03	9	3.14E-02
		10	7.60E-03	11	5.09E-05	-1					
103	531290	3	7.50E-02	-1							
103	541291	1	1.60E-01	2	1.03E+00	3	3.13E-01	7	4.59E-02	-1	
103	481300	1	3.04E-04	2	1.52E-04	3	2.28E-04	4	3.80E-04	5	4.56E-04
		6	1.58E-03	7	6.50E-03	8	1.12E-02	9	2.85E-02	10	5.05E-02
		11	9.27E-02	12	7.94E-02	13	6.81E-02	14	5.76E-02	15	8.38E-02
		16	6.36E-02	17	8.20E-04	-1					
103	491300	1	2.64E-02	2	2.59E-01	3	2.06E-04	4	3.44E-04	5	2.04E-01
		6	4.32E-01	7	1.75E-02	8	1.02E-02	9	2.57E-02	10	4.12E-01
		11	4.07E-01	12	5.04E-01	13	1.06E-01	14	6.32E-02	15	7.28E-02
		16	3.20E-02	17	1.39E-06	18	2.05E-07	-1			
103	501300	1	5.40E-02	2	5.29E-01	4	3.55E-01	6	6.04E-02	7	9.37E-01
		8	1.92E-01	9	3.91E-02	10	7.99E-01	-1			
103	511300	1	1.22E-02	2	8.75E-02	3	1.98E-02	7	7.24E-01	8	8.38E-01
		9	4.77E-01	10	2.50E+00	11	2.49E-01	12	1.33E-01	13	4.00E-03
		-1									
103	511301	1	7.20E-03	2	5.10E-02	3	1.15E-02	7	4.10E-01	8	7.60E-02
		9	2.19E-01	10	2.12E+00	11	5.62E-01	12	4.70E-02	13	1.50E-02
		14	3.00E-03	-1							
103	531300	1	1.80E-03	2	1.23E-02	3	2.83E-03	7	1.05E-03	8	3.44E-01
		9	2.02E+00	10	8.39E-01	11	1.35E-01	12	1.30E-03	-1	
103	531301	1	6.38E-02	2	1.46E-01	3	3.34E-02	9	1.68E-01	10	8.01E-06
		11	2.18E-03	12	4.47E-03	13	2.97E-04	14	1.46E-04	-1	
103	481310	1	3.69E-04	2	1.85E-04	3	2.77E-04	4	4.61E-04	5	5.54E-04
		6	1.91E-03	7	7.89E-03	8	1.36E-02	9	3.45E-02	10	6.13E-02
		11	1.13E-01	12	1.01E-01	13	9.66E-02	14	9.09E-02	15	1.57E-01
		16	2.07E-01	17	8.75E-02	18	2.80E-02	-1			
103	491310	1	4.30E-04	2	2.15E-04	3	3.23E-04	4	5.38E-04	5	6.45E-04
		6	2.23E-03	7	9.20E-03	8	1.59E-02	9	4.03E-02	10	7.84E-02
		11	1.18E-01	12	1.72E-02	13	6.39E-01	14	1.04E-05	15	1.88E-02
		16	2.64E-02	17	7.58E-06	18	2.66E-07	-1			

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103	501310	1	3.49E-04	2	1.75E-04	3	2.62E-04	4	4.37E-04	5	5.24E-04
		6	1.81E-03	7	7.47E-03	8	1.29E-02	9	3.27E-02	10	5.80E-02
		11	1.09E-01	12	1.09E-01	13	1.03E-01	14	7.63E-02	15	8.50E-02
		16	1.41E-02	-1							
103	511310	1	1.40E-04	2	1.08E-03	3	2.50E-04	6	2.50E-02	7	3.26E-02
		8	6.70E-02	9	3.40E-01	10	8.55E-01	11	2.64E-01	12	1.84E-01
		13	8.41E-02	14	1.34E-02	-1					
103	521310	1	1.46E-02	2	1.06E-01	3	2.41E-02	6	6.89E-01	7	4.20E-03
		8	1.72E-02	9	2.98E-01	10	7.98E-02	11	6.92E-02	12	2.07E-03
		13	1.31E-04	-1							
103	521311	1	2.85E-02	2	1.88E-01	3	4.26E-02	4	9.39E-04	5	4.49E-02
		6	1.47E-01	7	2.27E-01	8	1.41E-01	9	1.21E-01	10	9.99E-01
		11	2.92E-01	12	2.91E-02	13	2.80E-02	-1			
103	531310	1	5.70E-03	2	3.94E-02	3	9.10E-03	5	2.62E-02	7	6.47E-02
		8	8.22E-01	9	7.75E-02	10	1.77E-02	-1			
103	541311	1	8.00E-02	2	4.40E-01	3	1.02E-01	7	1.95E-02	-1	
103	481320	1	2.95E-04	2	1.47E-04	3	2.21E-04	4	3.69E-04	5	4.42E-04
		6	1.53E-03	7	6.31E-03	8	1.09E-02	9	2.76E-02	10	4.90E-02
		11	9.02E-02	12	8.01E-02	13	7.30E-02	14	6.64E-02	15	1.09E-01
		16	1.20E-01	17	3.56E-02	18	4.09E-03	-1			
103	491320	1	1.03E-02	2	9.53E-02	3	9.90E-05	4	1.11E-02	5	1.11E-02
		6	1.71E-01	7	4.02E-01	8	5.09E-01	9	3.83E-01	10	2.19E-02
		11	3.99E-02	12	3.07E-02	13	3.82E-01	14	2.66E-02	15	5.87E-02
		16	7.27E-01	17	3.66E-05	18	2.51E-05	-1			
103	501320	1	3.63E-02	2	3.52E-01	5	4.84E-01	6	1.18E-03	7	4.24E-01
		8	4.94E-01	9	7.13E-02	10	8.21E-01	11	1.23E-01	12	8.66E-03
103	511320	-1									
		1	1.70E-02	2	1.09E-01	3	2.50E-02	6	1.46E-01	8	1.65E-01
		9	9.80E-01	10	1.31E+00	11	2.48E-01	12	1.26E-01	13	9.90E-03
		14	2.48E-02	-1							
103	511321	1	4.60E-02	2	2.95E-01	3	6.70E-02	6	3.50E-01	7	7.40E-01
		8	1.40E-01	9	1.13E+00	10	1.12E+00	11	3.20E-01	12	6.00E-02
		14	4.00E-02	-1							
103	521320	1	8.20E-02	2	5.92E-01	3	2.10E-01	4	7.48E-02	6	3.70E-02
		7	8.80E-01	-1							
103	531320	1	1.20E-03	2	8.51E-03	3	1.97E-03	6	3.16E-03	7	2.48E-02
		8	3.12E-02	9	1.49E+00	10	1.14E+00	11	2.21E-01	12	2.27E-02
		13	1.97E-02	14	5.69E-04	-1					
103	551320	1	9.00E-02	2	6.03E-01	3	1.40E-01	8	6.83E-04	9	1.02E+00
		10	7.22E-04	11	1.24E-02	12	7.02E-04	-1			
103	491330	1	3.69E-04	2	1.85E-04	3	2.77E-04	4	4.61E-04	5	5.54E-04
		6	1.91E-03	7	7.89E-03	8	1.36E-02	9	3.45E-02	10	6.13E-02
		11	1.13E-01	12	1.01E-01	13	9.73E-02	14	9.33E-02	15	1.63E-01
		16	2.17E-01	17	9.09E-02	18	3.20E-02	-1			
103	501330	1	2.70E-03	2	1.35E-03	3	2.03E-03	4	3.38E-03	5	4.05E-03
		6	1.40E-02	7	5.78E-02	8	9.99E-02	9	2.53E-01	10	5.69E-01
		11	7.38E-01	12	5.14E-02	13	7.20E-04	14	3.67E-03	15	5.45E-03
		16	2.31E-02	17	3.97E-03	-1					
103	511330	7	2.54E-02	8	1.28E-01	9	1.26E-01	10	3.56E-01	11	9.65E-01
		12	3.50E-01	13	1.02E-01	14	1.25E-01	-1			
103	521330	1	2.27E-03	2	1.55E-02	3	3.50E-03	4	1.06E-03	7	3.12E-03
		8	9.21E-01	9	6.41E-02	10	2.94E-01	11	2.50E-01	12	7.51E-02
		13	6.04E-02	14	1.25E-02	-1					
103	521331	1	2.56E-02	2	1.56E-01	3	3.84E-02	4	2.10E-03	5	5.27E-02
		6	7.30E-03	7	2.32E-01	8	2.57E-01	9	3.67E-01	10	1.13E+00
		11	1.31E-01	12	1.23E-01	13	4.86E-02	14	2.49E-03	15	3.21E-03
		-1									
103	531330	1	6.90E-04	2	5.41E-03	3	1.26E-03	7	6.24E-03	8	8.37E-03
		9	9.02E-01	10	8.18E-02	11	4.60E-02	12	2.96E-05	-1	

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103	531331	1	8.10E-02	2	5.38E-01	3	1.23E-01	5	3.80E-02	9	1.00E+00
		10	1.00E+00	-1							
103	541330	1	6.30E-02	3	4.97E-01	5	3.83E-01	7	6.60E-04	8	7.20E-05
		-1									
103	541331	1	7.80E-02	2	4.59E-01	3	1.06E-01	7	1.00E-01	-1	
103	491340	1	4.42E-04	2	2.21E-04	3	3.32E-04	4	5.53E-04	5	6.63E-04
		6	2.29E-03	7	9.45E-03	8	1.64E-02	9	4.14E-02	10	7.34E-02
		11	1.36E-01	12	1.27E-01	13	1.24E-01	14	1.20E-01	15	2.20E-01
		16	3.06E-01	17	1.27E-01	18	4.67E-02	-1			
103	501340	1	1.03E-03	2	5.15E-04	3	7.73E-04	4	2.55E-03	5	1.55E-03
		6	5.34E-03	7	2.20E-02	8	6.93E-02	9	1.14E-01	10	2.36E-01
		11	3.19E-01	12	2.25E-01	13	7.23E-02	14	1.10E-04	15	1.52E-04
		16	1.25E-04	17	2.80E-06	-1					
103	511340	1	5.68E-04	2	4.02E-04	3	4.42E-04	4	9.89E-04	5	8.26E-04
		6	2.86E-03	7	1.30E-02	8	2.04E-02	9	5.16E-02	10	9.23E-02
		11	1.89E-01	12	1.52E-01	13	1.58E-01	14	1.52E-01	15	1.83E-01
		16	4.64E-02	17	5.00E-03	18	7.69E-08	-1			
103	511341	1	4.40E-02	2	2.90E-01	3	6.50E-02	6	4.90E-01	7	9.70E-01
		8	1.50E-02	10	5.74E-01	11	1.02E+00	-1			
103	521340	1	3.32E-02	2	2.46E-01	3	5.60E-02	5	2.12E-01	6	6.49E-03
		7	7.21E-01	8	1.89E-01	9	3.68E-01	10	5.27E-01	11	4.43E-03
		-1									
103	531340	1	2.40E-03	2	1.71E-02	3	3.94E-03	6	5.05E-02	7	3.65E-02
		8	1.29E-01	9	4.60E-01	10	1.85E+00	11	3.39E-01	12	1.42E-01
		13	1.06E-02	14	2.04E-03	-1					
103	531341	1	8.56E-02	2	6.03E-01	3	1.90E-01	4	5.20E-02	7	8.06E-01
		8	2.40E-03	10	4.64E-02	-1					
103	541341	1	2.70E-02	2	1.49E-01	3	3.40E-02	7	6.80E-01	10	1.94E+00
		-1									
103	551340	1	1.20E-03	3	8.40E-03	7	2.70E-04	8	1.62E-04	9	1.23E+00
		10	9.42E-01	11	5.79E-02	-1					
103	551341	1	1.71E-01	3	3.16E-01	6	1.26E-01	-1			
103	501350	1	4.24E-04	2	2.12E-04	3	3.18E-04	4	5.30E-04	5	6.36E-04
		6	2.20E-03	7	9.06E-03	8	1.57E-02	9	3.97E-02	10	7.04E-02
		11	1.30E-01	12	1.22E-01	13	1.17E-01	14	1.06E-01	15	1.60E-01
		16	1.49E-01	17	2.87E-02	18	1.14E-04	-1			
103	511350	1	3.41E-04	2	1.70E-04	3	2.56E-04	4	4.26E-04	5	5.11E-04
		6	1.77E-03	7	7.29E-03	8	1.26E-02	9	3.19E-02	10	5.66E-02
		11	1.04E-01	12	9.62E-02	13	9.30E-02	14	8.44E-02	15	1.22E-01
		16	1.02E-01	17	1.12E-02	-1					
103	521350	1	2.01E-03	2	1.01E-03	3	1.51E-03	4	2.52E-03	5	3.02E-03
		6	1.19E-02	7	1.47E-01	8	7.64E-02	9	5.61E-01	10	4.12E-01
		11	4.86E-01	12	8.11E-03	13	1.76E-02	14	1.80E-03	15	1.24E-02
		16	1.03E-02	17	3.10E-06	-1					
103	531350	1	2.20E-04	2	1.71E-03	3	4.00E-04	6	1.97E-04	7	5.77E-02
		8	5.31E-02	9	8.51E-02	10	1.02E-01	11	7.70E-01	12	2.50E-01
		13	2.65E-02	-1							
103	541350	1	6.30E-03	3	5.10E-02	7	9.03E-01	8	5.93E-03	9	2.95E-02
		10	1.25E-03	11	4.00E-05	-1					
103	541351	1	1.40E-02	2	1.15E-01	3	2.66E-02	9	8.05E-01	-1	
103	551351	1	2.60E-04	3	2.42E-03	10	1.96E+00	-1			
103	561351	7	1.56E-01	-1							
103	501360	1	3.24E-04	2	1.62E-04	3	2.43E-04	4	4.05E-04	5	4.86E-04
		6	1.68E-03	7	6.92E-03	8	1.20E-02	9	3.03E-02	10	5.38E-02
		11	9.92E-02	12	8.81E-02	13	7.77E-02	14	6.61E-02	15	9.47E-02
		16	7.40E-02	17	7.09E-03	-1					
103	511360	1	3.97E-04	2	1.98E-04	3	2.98E-04	4	4.96E-04	5	5.95E-04
		6	2.06E-03	7	8.48E-03	8	1.47E-02	9	3.71E-02	10	6.59E-02
		11	1.23E-01	12	1.18E-01	13	1.14E-01	14	1.04E-01	15	1.65E-01

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		16 1.66E-01	17 3.44E-02	18 2.32E-03	-1		
103	521360	1 1.30E-02	2 9.40E-02	3 2.13E-02	5 1.20E-01	6 2.82E-02	
		7 5.64E-03	8 2.09E-01	9 3.50E-01	10 5.45E-02	11 1.88E-02	
		12 1.32E-02	13 2.73E-01	14 2.01E-01	15 1.71E-01	-1	
103	531360	1 2.30E-04	2 1.72E-03	3 4.00E-04	7 1.03E-02	8 5.22E-02	
		9 3.60E-03	10 5.79E-02	11 9.47E-01	12 6.38E-02	13 1.77E-01	
		14 1.22E-01	15 1.99E-02	16 1.59E-02	17 4.39E-03	-1	
103	531361	1 1.40E-02	2 9.08E-02	3 2.10E-02	7 7.92E-01	8 1.22E+00	
		9 2.59E-02	10 1.42E-01	11 1.00E+00	12 1.15E-02	13 2.05E-02	
		15 1.51E-03	16 3.00E-04	-1			
103	551360	1 1.90E-02	3 1.11E-01	4 4.79E-02	5 5.18E-02	6 2.09E-03	
		7 3.10E-01	8 4.27E-01	9 1.05E-02	10 9.97E-01	11 9.98E-01	
		12 1.15E-03	-1				
103	561361	1 7.00E-02	3 3.10E-01	7 3.07E-01	8 2.15E-04	10 9.98E-01	
		11 1.00E+00	12 9.21E-05	-1			
103	511370	1 4.54E-04	2 2.27E-04	3 3.41E-04	4 5.68E-04	5 6.81E-04	
		6 2.36E-03	7 9.71E-03	8 1.68E-02	9 4.25E-02	10 7.54E-02	
		11 1.40E-01	12 1.33E-01	13 1.28E-01	14 1.14E-01	15 1.62E-01	
		16 1.27E-01	17 1.83E-02	18 4.26E-05	-1		
103	521370	1 3.83E-04	2 1.92E-04	3 2.88E-04	4 4.79E-04	5 5.75E-04	
		6 1.99E-03	7 8.20E-03	8 1.42E-02	9 3.59E-02	10 6.37E-02	
		11 1.18E-01	12 1.12E-01	13 1.05E-01	14 8.75E-02	15 1.11E-01	
		16 6.77E-02	17 1.68E-03	-1			
103	531370	7 2.13E-03	8 1.61E-02	9 8.68E-02	10 5.07E-02	11 2.49E-01	
		12 1.33E-01	13 6.53E-02	14 3.10E-02	15 5.40E-02	16 1.57E-02	
		-1					
103	541370	1 4.20E-04	3 3.30E-03	7 1.19E-03	8 1.40E-03	9 3.13E-01	
		10 9.49E-03	11 8.04E-03	12 1.00E-02	13 1.71E-03	14 2.28E-03	
		15 2.97E-04	-1				
103	561371	1 1.00E-02	3 7.32E-02	9 9.01E-01	-1		
103	511380	1 5.41E-04	2 2.71E-04	3 4.06E-04	4 6.77E-04	5 8.12E-04	
		6 2.81E-03	7 1.16E-02	8 2.00E-02	9 5.07E-02	10 8.99E-02	
		11 1.69E-01	12 1.69E-01	13 1.66E-01	14 1.52E-01	15 2.36E-01	
		16 2.15E-01	17 4.15E-02	18 4.78E-03	-1		
103	521380	1 3.63E-04	2 1.82E-04	3 2.72E-04	4 4.54E-04	5 5.45E-04	
		6 1.88E-03	7 7.76E-03	8 1.34E-02	9 3.40E-02	10 6.03E-02	
		11 1.11E-01	12 9.53E-02	13 7.73E-02	14 5.87E-02	15 6.84E-02	
		16 2.60E-02	-1				
103	531380	8 2.80E-03	9 5.98E-01	10 1.55E-01	11 7.39E-02	12 1.06E-01	
		13 9.02E-02	14 4.60E-02	15 3.92E-02	16 2.86E-02	-1	
103	541380	1 6.99E-02	3 3.65E-02	4 4.72E-04	6 6.93E-04	7 4.14E-01	
		8 2.94E-01	9 1.86E-02	10 3.31E-02	11 3.76E-02	12 1.97E-01	
		13 2.26E-01	-1				
103	551380	1 1.90E-03	3 1.37E-02	6 1.62E-02	7 2.52E-02	8 5.93E-02	
		9 4.21E-01	10 6.61E-02	11 1.11E+00	12 1.19E-02	13 1.59E-01	
		14 8.16E-02	15 5.41E-03	16 1.75E-04	-1		
103	551381	1 7.90E-02	2 7.08E-05	3 4.38E-01	4 1.77E-04	5 3.08E-03	
		6 1.40E-02	7 1.26E-01	8 1.51E-02	9 1.62E-01	10 2.47E-02	
		11 1.91E-01	12 4.79E-02	13 5.54E-02	14 2.74E-02	15 2.34E-03	
		16 1.56E-03	-1				
103	571380	1 6.70E-02	3 3.87E-01	10 3.36E-01	11 6.65E-01	-1	
103	511390	1 5.01E-04	2 2.51E-04	3 3.76E-04	4 6.27E-04	5 7.52E-04	
		6 2.60E-03	7 1.07E-02	8 1.85E-02	9 4.69E-02	10 8.33E-02	
		11 1.56E-01	12 1.53E-01	13 1.47E-01	14 1.29E-01	15 1.83E-01	
		16 1.38E-01	17 2.06E-02	18 1.06E-03	-1		
103	521390	1 5.30E-04	2 2.65E-04	3 3.97E-04	4 6.62E-04	5 7.94E-04	
		6 2.75E-03	7 1.13E-02	8 1.96E-02	9 4.96E-02	10 8.79E-02	
		11 1.64E-01	12 1.60E-01	13 1.48E-01	14 1.23E-01	15 1.59E-01	
		16 1.01E-01	17 8.98E-03	-1			

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103	531390	1	3.55E-04	2	1.78E-04	3	2.67E-04	4	4.44E-04	5	5.33E-04
		6	1.84E-03	7	7.60E-03	8	1.31E-02	9	3.33E-02	10	5.90E-02
		11	1.10E-01	12	1.03E-01	13	9.39E-02	14	7.65E-02	15	8.90E-02
		16	4.39E-02	17	4.21E-04	-1					
103	541390	1	1.10E-02	3	7.81E-02	4	1.06E-03	5	2.02E-03	6	9.13E-03
		7	1.10E+00	8	8.51E-02	9	1.46E-01	10	1.25E-01	11	1.15E-01
		12	9.40E-02	13	5.64E-02	14	3.00E-02	15	6.83E-03	-1	
103	551390	7	9.63E-04	8	2.32E-03	9	3.01E-02	10	1.23E-02	11	1.11E-01
		12	3.28E-02	13	2.75E-02	14	1.41E-02	15	7.45E-03	-1	
103	561390	1	6.70E-03	3	4.60E-02	7	2.38E-01	11	3.25E-03	12	7.31E-07
		13	4.96E-07	-1							
103	521400	1	3.84E-04	2	1.92E-04	3	2.88E-04	4	4.80E-04	5	5.76E-04
		6	1.99E-03	7	8.21E-03	8	1.42E-02	9	3.59E-02	10	6.38E-02
		11	1.18E-01	12	1.06E-01	13	8.86E-02	14	6.85E-02	15	8.15E-02
		16	4.09E-02	17	8.16E-04	-1					
103	531400	1	6.54E-04	2	3.27E-04	3	4.90E-04	4	8.17E-04	5	9.81E-04
		6	3.39E-03	7	1.40E-02	8	9.30E-01	9	9.22E-01	10	3.62E-01
		11	2.05E-01	12	2.28E-01	13	1.74E-01	14	5.46E-02	15	2.54E-03
		16	4.70E-05	17	6.21E-06	18	1.69E-07	-1			
103	541400	1	6.63E-02	2	2.14E-04	3	2.20E-01	4	7.55E-03	5	2.11E-02
		6	4.70E-02	7	4.30E-02	8	5.11E-02	9	1.69E-01	10	2.31E-01
		11	2.84E-01	12	1.13E-01	13	8.42E-02	14	6.00E-02	15	6.21E-02
		16	9.64E-07	-1							
103	551400	1	5.29E-04	2	6.45E-05	3	2.98E-03	4	1.61E-04	5	1.94E-04
		6	6.69E-04	7	2.76E-03	8	7.76E-03	9	5.85E-01	10	1.33E-01
		11	2.22E-01	12	1.87E-01	13	2.20E-01	14	9.08E-02	15	9.55E-02
		16	1.79E-02	17	4.78E-08	-1					
103	561400	1	1.62E-01	2	1.41E-01	3	1.55E-02	6	2.80E-03	7	6.22E-02
		8	6.23E-02	9	2.44E-01	-1					
103	571400	1	3.70E-03	2	1.43E-05	3	1.82E-02	4	8.97E-04	6	6.87E-03
		7	1.01E-02	8	2.34E-01	9	4.55E-01	10	4.32E-01	11	1.49E-03
		12	9.55E-01	13	8.72E-03	14	3.63E-02	15	2.86E-04	-1	
103	521410	1	5.77E-04	2	2.89E-04	3	4.33E-04	4	7.22E-04	5	8.66E-04
		6	2.99E-03	7	1.23E-02	8	2.13E-02	9	5.40E-02	10	9.59E-02
		11	1.80E-01	12	1.78E-01	13	1.65E-01	14	1.38E-01	15	1.77E-01
		16	1.08E-01	17	1.09E-02	18	1.62E-04	-1			
103	531410	1	4.69E-04	2	2.35E-04	3	3.52E-04	4	5.86E-04	5	7.04E-04
		6	2.43E-03	7	1.00E-02	8	1.73E-02	9	4.39E-02	10	7.79E-02
		11	1.46E-01	12	1.40E-01	13	1.27E-01	14	9.99E-02	15	1.16E-01
		16	5.95E-02	17	2.94E-03	-1					
103	541410	1	4.80E-02	3	2.88E-01	4	4.88E-02	5	4.03E-02	6	2.95E-01
		7	4.26E-02	8	9.10E-02	9	2.92E-01	10	3.77E-01	11	1.40E-01
		12	8.12E-02	13	2.65E-02	14	2.14E-02	15	1.20E-03	-1	
103	551410	1	8.84E-02	2	1.46E-04	3	5.33E-01	4	2.82E-02	5	4.37E-04
		6	1.51E-03	7	6.23E-03	8	1.18E-02	9	1.75E-01	10	6.19E-02
		11	2.23E-01	12	1.17E-01	13	6.74E-02	14	3.14E-02	15	3.29E-02
		16	9.41E-07	-1							
103	561410	1	1.10E-02	3	7.79E-02	4	1.15E-05	6	1.12E-02	7	7.05E-01
		8	4.23E-01	9	3.04E-01	10	1.50E-01	11	1.59E-01	12	6.57E-02
		13	1.31E-02	14	4.37E-04	-1					
103	571410	8	1.31E-05	9	2.95E-04	10	6.56E-05	11	1.66E-02	12	1.10E-03
		13	9.38E-04	-1							
103	581410	1	2.60E-02	3	1.54E-01	4	1.68E-02	6	4.82E-01	-1	
103	521420	1	4.07E-04	2	2.03E-04	3	3.05E-04	4	5.08E-04	5	6.10E-04
		6	2.11E-03	7	8.69E-03	8	1.50E-02	9	3.81E-02	10	6.75E-02
		11	1.26E-01	12	1.14E-01	13	9.66E-02	14	7.46E-02	15	8.73E-02
		16	4.31E-02	17	1.73E-03	-1					
103	531420	1	6.76E-04	2	3.38E-04	3	5.07E-04	4	8.45E-04	5	1.01E-03
		6	3.51E-03	7	1.45E-02	8	2.50E-02	9	6.33E-02	10	1.12E-01



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		11 2.12E-01	12 2.17E-01	13 2.03E-01	14 1.70E-01	15 2.20E-01
		16 1.37E-01	17 1.33E-02	18 4.82E-04	-1	
103	541420	1 7.15E-04	2 3.58E-04	3 5.37E-04	4 8.94E-04	5 1.07E-03
		6 3.71E-03	7 1.53E-02	8 2.64E-02	9 6.70E-02	10 1.19E-01
		11 2.16E-01	12 1.75E-01	13 1.29E-01	14 8.56E-02	15 7.85E-02
		16 1.40E-02	-1			
103	551420	1 2.31E-03	2 7.90E-04	3 6.35E-03	4 1.97E-03	5 2.37E-03
		6 8.20E-03	7 3.51E-02	8 3.30E-01	9 1.76E-01	10 3.64E-01
		11 6.36E-01	12 4.58E-02	13 2.10E-02	14 3.00E-02	15 3.31E-02
		16 2.45E-02	17 2.93E-05	-1		
103	561420	1 1.12E-02	3 2.91E-02	4 5.13E-03	5 9.54E-02	6 1.06E-02
		7 3.89E-01	8 1.79E-01	9 4.56E-02	10 2.99E-01	11 5.02E-01
		-1				
103	571420	1 3.60E-04	3 2.46E-03	6 1.42E-03	7 3.32E-03	8 1.37E-02
		9 4.97E-01	10 1.09E-01	11 1.75E-01	12 1.81E-01	13 2.83E-01
		14 1.97E-01	15 7.70E-02	-1		
103	591420	1 1.80E-05	3 1.20E-04	9 2.28E-04	12 3.68E-02	-1
103	531430	1 6.06E-04	2 3.03E-04	3 4.55E-04	4 7.58E-04	5 9.09E-04
		6 3.14E-03	7 1.30E-02	8 2.24E-02	9 5.67E-02	10 1.01E-01
		11 1.89E-01	12 1.82E-01	13 1.63E-01	14 1.28E-01	15 1.45E-01
		16 7.06E-02	17 3.91E-03	-1		
103	541430	1 6.67E-04	2 3.33E-04	3 5.00E-04	4 8.34E-04	5 1.00E-03
		6 3.46E-03	7 1.43E-02	8 2.47E-02	9 6.24E-02	10 1.11E-01
		11 2.08E-01	12 1.98E-01	13 1.59E-01	14 1.14E-01	15 1.23E-01
		16 5.09E-02	17 1.16E-03	-1		
103	551430	1 3.59E-02	2 4.70E-04	3 9.28E-03	4 1.18E-03	5 1.59E-03
		6 6.39E-03	7 5.12E-02	8 4.28E-02	9 1.13E-01	10 1.65E-01
		11 2.79E-01	12 1.94E-01	13 1.04E-01	14 2.59E-02	15 1.04E-05
		16 4.40E-06	-1			
103	561430	1 4.07E-02	2 9.96E-04	3 3.27E-02	6 1.99E-04	7 4.43E-01
		8 1.05E-01	9 1.34E-01	10 5.13E-01	11 2.96E-01	12 2.01E-02
		13 4.34E-02	-1			
103	571430	8 1.51E-03	9 6.66E-02	10 2.55E-02	11 6.03E-02	12 4.38E-02
		13 5.58E-03	14 1.55E-02	-1		
103	581430	1 9.60E-02	3 5.61E-01	4 1.78E-01	6 8.56E-04	7 4.49E-01
		8 3.54E-02	9 8.23E-02	10 6.55E-02	11 5.67E-03	-1
103	531440	1 7.08E-04	2 3.54E-04	3 5.31E-04	4 8.85E-04	5 1.06E-03
		6 3.67E-03	7 1.51E-02	8 2.62E-02	9 6.63E-02	10 1.18E-01
		11 2.22E-01	12 2.28E-01	13 2.12E-01	14 1.75E-01	15 2.22E-01
		16 1.32E-01	17 1.20E-02	18 4.40E-04	-1	
103	541440	1 4.02E-04	2 2.01E-04	3 3.02E-04	4 5.03E-04	5 6.03E-04
		6 2.09E-03	7 8.59E-03	8 1.49E-02	9 3.76E-02	10 6.68E-02
		11 1.23E-01	12 1.03E-01	13 7.58E-02	14 5.00E-02	15 4.56E-02
		16 9.89E-03	-1			
103	551440	1 5.85E-04	2 2.92E-04	3 4.39E-04	4 7.31E-04	5 8.77E-04
		6 3.03E-03	7 1.25E-02	8 2.16E-02	9 5.47E-02	10 9.71E-02
		11 1.83E-01	12 1.83E-01	13 1.61E-01	14 1.23E-01	15 1.41E-01
		16 6.78E-02	17 3.67E-03	18 8.02E-09	-1	
103	561440	1 5.36E-04	2 2.68E-04	3 4.02E-04	4 6.70E-04	5 8.04E-04
		6 2.78E-03	7 1.15E-02	8 1.98E-02	9 5.01E-02	10 8.90E-02
		11 1.60E-01	12 1.12E-01	13 6.15E-02	14 2.12E-02	15 5.41E-07
		-1				
103	571440	1 2.80E-03	3 1.84E-02	8 1.02E+00	9 5.39E-01	10 5.30E-01
		11 3.43E-01	12 2.25E-01	13 9.00E-02	14 4.55E-02	15 7.64E-03
		-1				
103	581440	1 1.61E-02	3 8.18E-02	4 1.08E-02	5 1.40E-02	6 1.11E-01
		-1				
103	591440	9 1.34E-02	10 5.60E-05	11 6.78E-05	12 8.72E-06	13 2.68E-06
		-1				

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103	591441	1	1.11E-01	3	2.76E-01	4	3.07E-02	-1						
103	531450	1	6.03E-04	2	3.02E-04	3	4.53E-04	4	7.54E-04	5	9.05E-04			
		6	3.13E-03	7	1.29E-02	8	2.23E-02	9	5.65E-02	10	1.00E-01			
		11	1.88E-01	12	1.83E-01	13	1.66E-01	14	1.31E-01	15	1.53E-01			
		16	7.87E-02	17	5.27E-03	-1								
103	541450	1	5.56E-04	2	2.78E-04	3	4.17E-04	4	6.95E-04	5	8.34E-04			
		6	2.88E-03	7	1.19E-02	8	2.06E-02	9	5.20E-02	10	9.23E-02			
		11	1.73E-01	12	1.65E-01	13	1.41E-01	14	1.05E-01	15	1.11E-01			
		16	4.58E-02	17	1.35E-03	-1								
103	551450	1	1.94E-02	2	2.23E-04	3	1.21E-01	4	5.57E-04	5	1.13E-02			
		6	3.95E-02	7	1.76E-01	8	9.36E-02	9	1.57E-01	10	1.09E-01			
		11	1.45E-01	12	1.34E-01	13	1.06E-01	14	6.96E-02	15	6.24E-02			
		16	1.67E-02	17	6.98E-09	-1								
103	561450	1	6.01E-02	2	5.31E-04	3	4.07E-01	4	4.82E-03	5	1.77E-02			
		6	6.30E-03	7	3.24E-02	8	5.34E-02	9	1.15E-01	10	1.79E-01			
		11	3.18E-01	12	2.02E-01	13	6.93E-02	14	3.67E-04	15	4.54E-06			
		16	1.33E-06	-1										
103	571450	1	7.59E-02	2	9.33E-04	3	4.73E-01	4	1.28E-01	5	2.80E-03			
		6	4.61E-02	7	1.28E-01	8	2.21E-01	9	3.00E-01	10	4.56E-01			
		11	5.54E-01	12	8.78E-02	13	7.51E-02	14	3.08E-03	15	1.74E-05			
		16	3.89E-07	-1										
103	581450	1	8.14E-02	2	2.17E-04	3	4.72E-01	4	1.25E-01	5	6.51E-04			
		6	4.94E-03	7	7.99E-02	8	1.10E-01	9	8.00E-02	10	4.30E-01			
		11	2.02E-01	12	1.21E-01	13	5.29E-02	-1						
103	591450	1	1.32E-03	3	6.95E-03	4	8.49E-04	5	2.70E-03	7	6.93E-05			
		8	4.72E-04	9	6.43E-03	10	1.03E-02	11	4.40E-03	12	1.57E-05			
		-1												
103	541460	1	4.34E-04	2	2.17E-04	3	3.25E-04	4	5.42E-04	5	6.50E-04			
		6	2.25E-03	7	9.27E-03	8	1.60E-02	9	4.06E-02	10	7.20E-02			
		11	1.33E-01	12	1.14E-01	13	8.69E-02	14	5.95E-02	15	5.76E-02			
		16	1.67E-02	-1										
103	551460	1	7.87E-04	2	3.94E-04	3	5.91E-04	4	9.84E-04	5	1.18E-03			
		6	4.08E-03	7	1.68E-02	8	2.91E-02	9	7.37E-02	10	1.31E-01			
		11	2.43E-01	12	2.19E-01	13	1.80E-01	14	1.29E-01	15	1.19E-01			
		16	3.84E-02	17	4.29E-05	-1								
103	561460	1	2.41E-02	4	7.53E-03	5	1.53E-02	6	3.99E-01	7	8.19E-01			
		8	3.28E-01	9	1.56E-01	10	1.73E-01	11	1.58E-01	12	2.19E-02			
		13	1.42E-03	-1										
103	571460	1	6.13E-03	2	2.16E-04	3	3.72E-02	4	5.40E-04	5	6.48E-04			
		6	2.85E-03	7	6.54E-01	8	6.88E-02	9	1.26E-01	10	3.02E-01			
		11	2.67E-01	12	8.68E-02	13	1.23E-01	14	4.99E-02	15	2.28E-02			
		16	2.17E-03	17	2.50E-08	-1								
103	581460	1	1.48E-02	2	1.12E-04	3	8.78E-02	4	1.36E-02	5	3.99E-02			
		6	1.46E-01	7	3.78E-01	8	6.01E-01	9	2.02E-02	-1				
103	591460	6	4.46E-04	7	1.54E-04	8	7.68E-04	9	5.24E-01	10	1.74E-01			
		11	1.39E-01	12	1.91E-01	13	4.11E-02	14	1.45E-02	15	4.47E-03			
		-1												
103	541470	1	6.42E-04	2	3.21E-04	3	4.82E-04	4	8.03E-04	5	9.63E-04			
		6	3.33E-03	7	1.37E-02	8	2.37E-02	9	6.01E-02	10	1.07E-01			
		11	2.00E-01	12	1.94E-01	13	1.70E-01	14	1.31E-01	15	1.47E-01			
		16	6.89E-02	17	3.41E-03	-1								
103	551470	1	1.66E-02	2	5.19E-04	3	1.08E-01	4	2.10E-03	5	7.16E-03			
		6	8.51E-03	7	2.36E-02	8	4.00E-02	9	6.26E-02	10	1.01E-01			
		11	1.88E-01	12	1.69E-01	13	1.26E-01	14	8.55E-02	15	8.17E-02			
		16	2.47E-02	17	7.94E-09	-1								
103	561470	1	1.68E-02	2	3.90E-04	3	7.01E-02	4	1.60E-03	5	7.14E-03			
		6	1.49E-02	7	5.66E-02	8	4.25E-02	9	8.14E-02	10	1.32E-01			
		11	2.42E-01	12	1.82E-01	13	1.10E-01	14	5.83E-02	15	2.68E-02			
		16	1.91E-07	-1										

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103	571470	1	1.87E-02	2	3.64E-04	3	1.08E-01	4	2.67E-03	5	2.97E-03
		6	4.18E-02	7	9.24E-02	8	7.59E-02	9	9.31E-02	10	1.22E-01
		11	2.17E-01	12	1.45E-01	13	7.07E-02	14	1.61E-02	15	1.12E-06
		16	9.70E-08	-1							
103	581470	1	9.06E-04	2	4.53E-04	3	8.60E-04	4	2.42E-03	5	1.12E-02
		6	5.56E-03	7	4.93E-02	8	4.35E-02	9	1.07E-01	10	1.59E-01
		11	2.72E-01	12	1.72E-01	13	6.33E-02	14	2.49E-02	15	3.18E-03
		-1									
103	591470	1	1.58E-01	3	8.27E-01	4	1.15E-01	5	1.86E-01	6	6.74E-02
		7	3.00E-02	8	1.99E-01	9	2.77E-01	10	5.09E-02	11	9.13E-02
		12	1.59E-02	13	4.49E-03	-1					
103	601470	1	7.90E-02	3	4.09E-01	4	4.55E-02	5	2.79E-01	6	3.96E-03
		7	1.03E-02	8	4.16E-02	9	1.44E-01	-1			
103	611470	3	5.63E-06	4	5.64E-06	6	2.85E-05	-1			
103	551480	1	9.62E-04	2	4.81E-04	3	7.22E-04	4	1.20E-03	5	1.44E-03
		6	4.99E-03	7	2.06E-02	8	3.56E-02	9	9.00E-02	10	1.60E-01
		11	3.00E-01	12	2.76E-01	13	2.22E-01	14	1.64E-01	15	1.76E-01
		16	7.36E-02	17	2.74E-03	-1					
103	561480	1	4.16E-02	2	2.95E-04	3	2.84E-01	4	1.56E-01	5	4.69E-02
		6	3.96E-02	7	7.84E-02	8	7.82E-02	9	7.25E-02	10	1.05E-01
		11	1.87E-01	12	1.20E-01	13	6.27E-02	14	1.88E-02	15	4.49E-06
		16	4.52E-08	-1							
103	571480	1	2.50E-02	3	1.50E-01	4	5.00E-03	7	6.50E-01	8	8.12E-02
		9	2.07E-01	10	3.86E-01	11	8.90E-02	12	9.73E-02	13	1.50E-01
		14	3.34E-03	-1							
103	581480	1	5.80E-02	3	3.31E-01	4	3.59E-02	5	1.74E-01	6	2.60E-01
		7	6.87E-01	8	1.95E-01	9	2.02E-02	-1			
103	591480	1	4.26E-03	2	1.32E-04	3	2.11E-02	4	2.63E-03	5	3.96E-04
		6	2.90E-03	7	9.00E-03	8	6.36E-01	9	1.96E-01	10	1.89E-01
		11	3.41E-01	12	9.14E-02	13	5.63E-02	14	2.44E-02	15	6.05E-07
		16	1.18E-07	-1							
103	611480	1	3.50E-04	3	1.22E-03	4	6.80E-04	8	6.44E-04	9	2.34E-01
		10	1.27E-01	11	2.23E-01	12	6.17E-04	13	4.44E-04	-1	
103	611481	1	1.60E-02	3	4.43E-02	4	1.24E-02	5	3.57E-02	7	1.37E-01
		8	2.80E-01	9	2.09E+00	10	4.98E-01	11	2.03E-01	-1	
103	551490	1	6.63E-04	2	3.32E-04	3	4.97E-04	4	8.29E-04	5	9.95E-04
		6	3.44E-03	7	1.42E-02	8	2.45E-02	9	6.21E-02	10	1.10E-01
		11	2.07E-01	12	2.02E-01	13	1.79E-01	14	1.37E-01	15	1.52E-01
		16	7.06E-02	17	4.07E-03	18	6.39E-09	-1			
103	561490	1	5.53E-04	2	2.76E-04	3	4.14E-04	4	6.91E-04	5	8.29E-04
		6	2.87E-03	7	1.18E-02	8	2.04E-02	9	5.17E-02	10	9.18E-02
		11	1.71E-01	12	1.58E-01	13	1.27E-01	14	8.78E-02	15	8.07E-02
		16	2.47E-02	17	3.32E-05	-1					
103	571490	1	4.72E-04	2	2.36E-04	3	3.54E-04	4	5.90E-04	5	7.08E-04
		6	2.45E-03	7	1.01E-02	8	1.74E-02	9	4.42E-02	10	7.83E-02
		11	1.45E-01	12	1.28E-01	13	9.83E-02	14	6.13E-02	15	4.65E-02
		16	8.51E-03	-1							
103	581490	1	7.16E-04	2	3.58E-04	3	5.37E-04	4	8.95E-04	5	1.07E-03
		6	3.71E-03	7	1.53E-02	8	2.65E-02	9	6.70E-02	10	1.19E-01
		11	2.14E-01	12	1.44E-01	13	8.49E-02	14	4.33E-02	15	2.07E-02
		-1									
103	591490	1	4.03E-02	2	1.44E-04	3	1.91E-01	4	2.14E-02	5	4.08E-03
		6	1.95E-01	7	2.50E-01	8	2.16E-01	9	1.63E-01	10	1.01E-01
		11	8.55E-02	12	5.41E-02	13	2.71E-02	14	7.84E-03	-1	
103	601490	1	6.60E-02	2	5.44E-05	3	2.89E-01	4	4.54E-02	5	3.85E-02
		6	2.05E-01	7	6.50E-01	8	1.72E-01	9	1.71E-01	10	1.15E-02
		11	4.41E-03	12	5.18E-06	-1					
103	611490	1	1.40E-03	2	2.48E-04	3	1.49E-03	4	8.30E-04	7	3.15E-02
		8	9.61E-05	9	1.20E-03	10	1.68E-03	-1			

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103	551500	1	7.51E-04	2	3.75E-04	3	5.63E-04	4	9.38E-04	5	1.13E-03
		6	3.89E-03	7	1.60E-02	8	2.78E-02	9	7.03E-02	10	1.25E-01
		11	2.36E-01	12	2.43E-01	13	2.24E-01	14	1.82E-01	15	2.26E-01
		16	1.27E-01	17	1.08E-02	18	4.10E-04	-1			
103	561500	1	4.62E-04	2	2.31E-04	3	3.46E-04	4	5.77E-04	5	6.93E-04
		6	2.40E-03	7	9.87E-03	8	1.71E-02	9	4.32E-02	10	7.67E-02
		11	1.42E-01	12	1.21E-01	13	8.99E-02	14	5.93E-02	15	5.38E-02
		16	1.42E-02	-1							
103	571500	1	8.25E-04	2	4.12E-04	3	6.19E-04	4	1.03E-03	5	1.24E-03
		6	4.28E-03	7	1.76E-02	8	3.05E-02	9	7.72E-02	10	1.37E-01
		11	2.58E-01	12	2.48E-01	13	2.05E-01	14	1.45E-01	15	1.46E-01
		16	5.52E-02	17	1.36E-03	-1					
103	581500	1	4.95E-04	2	2.48E-04	3	3.72E-04	4	6.19E-04	5	7.43E-04
		6	2.57E-03	7	1.06E-02	8	1.83E-02	9	4.64E-02	10	8.23E-02
		11	1.45E-01	12	7.58E-02	13	9.69E-03	-1			
		16	3.34E-06	-1							
103	591500	1	3.57E-02	2	3.44E-04	3	1.54E-01	4	1.74E-02	5	1.03E-03
		6	3.24E-01	7	4.68E-02	8	8.01E-02	9	1.15E-01	10	3.71E-01
		11	3.80E-01	12	9.08E-02	13	2.59E-03	14	9.76E-04	15	1.44E-05
		16	3.34E-06	-1							
103	611500	1	4.00E-03	3	1.31E-02	4	7.30E-03	7	5.85E-03	8	7.56E-01
		9	5.00E-02	10	3.27E-01	11	5.08E-01	12	1.15E-01	13	1.94E-02
		14	1.11E-02	15	8.02E-04	-1					
		16	5.29E-02	17	1.75E-03	-1					
103	561510	1	7.02E-04	2	3.51E-04	3	5.26E-04	4	8.77E-04	5	1.05E-03
		6	3.64E-03	7	1.50E-02	8	2.59E-02	9	6.57E-02	10	1.17E-01
		11	2.19E-01	12	2.10E-01	13	1.77E-01	14	1.29E-01	15	1.34E-01
		16	5.29E-02	17	1.75E-03	-1					
103	571510	1	5.76E-04	2	2.88E-04	3	4.32E-04	4	7.21E-04	5	8.65E-04
		6	2.99E-03	7	1.23E-02	8	2.13E-02	9	5.40E-02	10	9.57E-02
		11	1.79E-01	12	1.66E-01	13	1.34E-01	14	9.18E-02	15	8.46E-02
		16	2.70E-02	17	3.23E-04	-1					
103	581510	1	5.12E-04	2	2.56E-04	3	3.84E-04	4	6.40E-04	5	7.69E-04
		6	2.66E-03	7	1.10E-02	8	1.89E-02	9	4.80E-02	10	8.51E-02
		11	1.55E-01	12	1.18E-01	13	7.47E-02	14	4.09E-02	15	2.61E-02
		16	8.22E-04	-1							
103	591510	1	2.71E-04	2	1.05E-02	3	2.03E-04	4	8.05E-02	5	2.49E-02
		6	4.93E-02	7	1.33E-01	8	1.24E-01	9	3.15E-01	10	1.39E-01
		11	8.11E-02	12	5.60E-02	13	3.12E-02	14	1.38E-02	15	3.64E-03
		-1									
103	601510	1	4.01E-02	3	1.90E-01	4	3.92E-02	5	4.34E-02	6	5.24E-01
		7	3.26E-01	8	1.62E-01	9	1.26E-01	10	2.63E-01	11	3.30E-01
		12	3.50E-02	13	1.38E-03	-1					
		16	3.25E-02	17	1.01E-03	-1					
103	611510	1	5.76E-02	2	9.67E-03	3	1.92E-01	4	1.44E-01	5	6.73E-03
		6	8.70E-02	7	3.47E-01	8	3.45E-01	9	5.40E-02	10	9.70E-02
		11	3.60E-05	-1							
		16	3.14E-04	-1							
103	621510	2	3.14E-04	-1							
		1	4.61E-04	2	2.31E-04	3	3.46E-04	4	5.76E-04	5	6.92E-04
		6	2.39E-03	7	9.86E-03	8	1.70E-02	9	4.32E-02	10	7.66E-02
		11	1.43E-01	12	1.30E-01	13	1.06E-01	14	7.74E-02	15	8.16E-02
103	571520	1	8.30E-04	2	4.15E-04	3	6.22E-04	4	1.04E-03	5	1.24E-03
		6	4.30E-03	7	1.77E-02	8	3.07E-02	9	7.76E-02	10	1.38E-01
		11	2.60E-01	12	2.58E-01	13	2.22E-01	14	1.65E-01	15	1.77E-01
		16	7.62E-02	17	3.49E-03	18	7.86E-06	-1			
103	581520	1	5.24E-04	2	2.62E-04	3	3.93E-04	4	6.55E-04	5	7.86E-04
		6	2.72E-03	7	1.12E-02	8	1.94E-02	9	4.91E-02	10	8.70E-02
		11	1.58E-01	12	1.13E-01	13	6.69E-02	14	3.25E-02	15	1.11E-02
		-1									
103	591520	1	1.20E-03	2	5.98E-04	3	8.96E-04	4	1.49E-03	5	1.79E-03
		6	6.20E-03	7	2.55E-02	8	4.42E-02	9	1.12E-01	10	1.98E-01

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		11 3.64E-01	12 2.99E-01	13 2.22E-01	14 1.08E-01	15 3.01E-02
		16 8.10E-08	-1			
103	601520	1 1.55E-01	2 1.28E-02	3 9.57E-03	4 1.06E-03	5 1.28E-02
		7 5.89E-01	-1			
103	611520	1 2.60E-02	3 6.40E-02	4 3.60E-02	6 1.57E-01	7 5.81E-03
		8 2.91E-03	9 1.98E-02	10 7.66E-02	11 1.79E-02	12 2.66E-03
		13 5.64E-03	14 6.64E-04	-1		
103	611521	1 8.60E-02	3 2.21E-01	4 1.24E-01	6 4.51E-01	7 7.84E-01
		8 3.38E-01	9 1.08E-01	10 1.78E-01	11 6.80E-01	12 1.72E-02
		13 1.55E-02	14 5.17E-03	-1		
103	631520	1 1.53E-01	3 4.78E-01	4 2.68E-01	6 2.85E-01	7 8.17E-02
		8 3.32E-01	9 3.60E-02	10 3.38E-01	11 5.11E-01	12 2.92E-03
		-1				
103	631521	1 5.32E-02	3 1.74E-01	4 9.69E-02	6 7.23E-02	7 1.02E-03
		8 2.47E-02	9 4.05E-03	10 2.75E-01	11 8.45E-03	12 2.26E-04
		-1				
103	571530	1 6.34E-04	2 3.17E-04	3 4.76E-04	4 7.93E-04	5 9.51E-04
		6 3.29E-03	7 1.36E-02	8 2.34E-02	9 5.94E-02	10 1.05E-01
		11 1.98E-01	12 1.91E-01	13 1.64E-01	14 1.21E-01	15 1.25E-01
		16 5.02E-02	17 2.23E-03	-1		
103	581530	1 4.73E-04	2 2.37E-04	3 3.55E-04	4 5.92E-04	5 7.10E-04
		6 2.46E-03	7 1.01E-02	8 1.75E-02	9 4.43E-02	10 7.86E-02
		11 1.46E-01	12 1.30E-01	13 9.95E-02	14 6.38E-02	15 5.10E-02
		16 1.02E-02	-1			
103	591530	1 4.84E-04	2 2.42E-04	3 3.63E-04	4 6.06E-04	5 7.27E-04
		6 2.51E-03	7 1.04E-02	8 1.79E-02	9 4.53E-02	10 8.05E-02
		11 1.50E-01	12 1.30E-01	13 9.25E-02	14 5.25E-02	15 3.96E-02
		16 5.81E-03	-1			
103	601530	1 4.95E-04	2 2.47E-04	3 3.71E-04	4 6.18E-04	5 7.42E-04
		6 2.57E-03	7 1.06E-02	8 1.83E-02	9 4.63E-02	10 8.21E-02
		11 1.48E-01	12 1.02E-01	13 5.60E-02	14 2.39E-02	15 4.62E-03
		-1				
103	611530	1 2.33E-04	2 1.16E-04	3 1.74E-04	4 2.91E-04	5 3.49E-04
		6 1.21E-03	7 4.97E-03	8 8.60E-03	9 2.18E-02	10 3.86E-02
		11 7.25E-02	12 1.60E-02	-1		
103	621530	1 7.00E-02	3 2.11E-01	4 2.60E-01	5 1.59E-02	6 3.14E-01
		7 9.22E-04	8 2.53E-05	9 1.58E-03	10 8.01E-07	-1
103	641530	1 1.51E-01	3 3.78E-01	4 4.04E-01	5 3.06E-01	6 2.14E-01
		7 4.80E-04	-1			
103	571540	1 8.23E-04	2 4.11E-04	3 6.17E-04	4 1.03E-03	5 1.23E-03
		6 4.27E-03	7 1.76E-02	8 3.04E-02	9 7.70E-02	10 1.37E-01
		11 2.59E-01	12 2.63E-01	13 2.34E-01	14 1.82E-01	15 2.08E-01
		16 9.94E-02	17 6.24E-03	18 1.42E-04	-1	
103	581540	1 4.94E-04	2 2.47E-04	3 3.70E-04	4 6.17E-04	5 7.41E-04
		6 2.56E-03	7 1.06E-02	8 1.83E-02	9 4.62E-02	10 8.20E-02
		11 1.49E-01	12 1.17E-01	13 8.03E-02	14 4.84E-02	15 3.80E-02
		16 5.55E-03	-1			
103	591540	1 1.16E-01	2 4.13E-04	3 3.15E-01	4 3.55E-02	5 1.13E-01
		6 4.28E-03	7 1.70E-01	8 3.05E-02	9 1.81E-01	10 3.50E-01
		11 2.67E-01	12 2.31E-01	13 1.80E-01	14 1.19E-01	15 1.01E-01
		16 2.80E-02	17 1.63E-04	-1		
103	601540	1 1.24E-01	2 2.70E-03	3 2.79E-01	4 7.04E-02	5 8.65E-02
		6 1.23E-01	7 1.93E-01	8 1.62E-02	9 6.94E-02	10 3.23E-01
		11 1.37E-01	12 3.37E-02	13 6.82E-07	-1	
103	611540	1 8.70E-02	3 1.55E-01	4 8.69E-02	5 1.26E-01	6 2.50E-03
		7 5.52E-02	8 5.82E-03	9 3.42E-02	10 3.68E-01	11 4.23E-01
		12 5.92E-02	13 3.17E-01	14 3.89E-02	15 1.13E-03	-1
103	611541	1 1.04E-01	3 2.14E-01	4 1.66E-01	5 1.46E-01	6 7.26E-02
		7 6.53E-01	8 1.52E-01	9 2.24E-01	10 3.28E-01	11 5.06E-01

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		12	2.46E-01	13	1.45E-02	14	1.90E-03	-1				
103	631540	1	7.71E-02	3	1.30E-01	4	1.30E-01	5	6.16E-05	6	4.06E-01	
		7	7.25E-02	8	1.00E-02	9	9.16E-02	10	5.06E-01	11	5.56E-01	
		12	1.86E-02	-1								
103	571550	1	7.13E-04	2	3.57E-04	3	5.35E-04	4	8.91E-04	5	1.07E-03	
		6	3.70E-03	7	1.52E-02	8	2.64E-02	9	6.67E-02	10	1.18E-01	
		11	2.24E-01	12	2.23E-01	13	1.98E-01	14	1.54E-01	15	1.74E-01	
		16	8.15E-02	17	5.40E-03	18	1.20E-04	-1				
103	581550	1	5.78E-04	2	2.89E-04	3	4.34E-04	4	7.23E-04	5	8.68E-04	
		6	3.00E-03	7	1.24E-02	8	2.14E-02	9	5.41E-02	10	9.61E-02	
		11	1.79E-01	12	1.65E-01	13	1.32E-01	14	9.02E-02	15	8.21E-02	
		16	2.48E-02	17	4.59E-05	-1						
103	591550	1	5.78E-04	2	2.89E-04	3	4.34E-04	4	7.23E-04	5	8.68E-04	
		6	3.00E-03	7	1.24E-02	8	2.14E-02	9	5.41E-02	10	9.60E-02	
		11	1.79E-01	12	1.62E-01	13	1.28E-01	14	8.37E-02	15	7.19E-02	
		16	1.98E-02	17	5.41E-05	-1						
103	601550	1	5.23E-04	2	2.61E-04	3	3.92E-04	4	6.53E-04	5	7.84E-04	
		6	2.71E-03	7	1.12E-02	8	1.93E-02	9	4.89E-02	10	8.68E-02	
		11	1.58E-01	12	1.16E-01	13	7.03E-02	14	3.65E-02	15	2.02E-02	
		16	1.69E-04	-1								
103	611550	1	5.11E-04	2	2.56E-04	3	3.83E-04	4	6.39E-04	5	7.67E-04	
		6	2.65E-03	7	1.09E-02	8	1.89E-02	9	4.79E-02	10	8.49E-02	
		11	1.52E-01	12	1.00E-01	13	5.07E-02	14	1.68E-02	15	4.55E-07	
		-1										
103	621550	1	3.60E-02	2	5.22E-03	3	9.38E-02	4	9.08E-02	5	2.97E-03	
		6	7.67E-01	7	3.93E-02	8	2.31E-04	9	3.53E-03	10	4.42E-04	
		11	1.31E-03	-1								
103	631550	1	8.18E-02	2	3.25E-03	3	1.22E-01	4	1.34E-01	5	3.09E-01	
		6	2.12E-01	-1								
103	581560	1	4.75E-04	2	2.38E-04	3	3.57E-04	4	5.94E-04	5	7.13E-04	
		6	2.47E-03	7	1.02E-02	8	1.76E-02	9	4.45E-02	10	7.89E-02	
		11	1.46E-01	12	1.27E-01	13	9.58E-02	14	6.37E-02	15	5.86E-02	
		16	1.70E-02	17	1.86E-08	-1						
103	591560	1	8.51E-04	2	4.25E-04	3	6.38E-04	4	1.06E-03	5	1.28E-03	
		6	4.41E-03	7	1.82E-02	8	3.15E-02	9	7.96E-02	10	1.41E-01	
		11	2.67E-01	12	2.59E-01	13	2.15E-01	14	1.54E-01	15	1.55E-01	
		16	5.97E-02	17	1.90E-03	-1						
103	601560	1	5.71E-04	2	2.85E-04	3	4.28E-04	4	7.13E-04	5	8.56E-04	
		6	2.96E-03	7	1.22E-02	8	2.11E-02	9	5.34E-02	10	9.48E-02	
		11	1.69E-01	12	1.09E-01	13	6.25E-02	14	2.89E-02	15	8.13E-03	
		-1										
103	611560	1	1.63E-03	2	8.16E-04	3	1.22E-03	4	2.04E-03	5	2.45E-03	
		6	8.46E-03	7	3.49E-02	8	6.03E-02	9	1.53E-01	10	2.71E-01	
		11	4.87E-01	12	3.75E-01	13	1.33E-01	14	1.52E-05	15	1.32E-05	
		16	3.52E-06	-1								
103	621560	1	2.50E-01	2	7.25E-02	3	7.25E-02	4	8.00E-02	5	2.40E-01	
		6	1.76E-02	7	4.10E-01	-1						
103	631560	1	5.10E-02	3	6.35E-02	4	6.35E-02	5	8.44E-02	6	7.86E-05	
		7	8.02E-03	8	3.07E-03	9	8.89E-02	10	2.23E-01	11	4.26E-01	
		12	8.11E-02	13	1.51E-01	-1						
103	581570	1	6.49E-04	2	3.24E-04	3	4.87E-04	4	8.11E-04	5	9.73E-04	
		6	3.37E-03	7	1.39E-02	8	2.40E-02	9	6.07E-02	10	1.08E-01	
		11	2.02E-01	12	1.95E-01	13	1.66E-01	14	1.20E-01	15	1.23E-01	
		16	4.86E-02	17	1.92E-03	-1						
103	591570	1	6.41E-04	2	3.21E-04	3	4.81E-04	4	8.01E-04	5	9.62E-04	
		6	3.33E-03	7	1.37E-02	8	2.37E-02	9	6.00E-02	10	1.06E-01	
		11	2.00E-01	12	1.89E-01	13	1.55E-01	14	1.08E-01	15	1.03E-01	
		16	3.58E-02	17	9.91E-04	-1						
103	601570	1	5.17E-04	2	2.59E-04	3	3.88E-04	4	6.47E-04	5	7.76E-04	

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		6 2.68E-03	7 1.11E-02	8 1.91E-02	9 4.84E-02	10 8.59E-02
		11 1.59E-01	12 1.40E-01	13 1.04E-01	14 6.08E-02	15 4.57E-02
		16 7.26E-03	-1			
103	611570	1 4.93E-04	2 2.47E-04	3 3.70E-04	4 6.16E-04	5 7.40E-04
		6 2.56E-03	7 1.05E-02	8 1.82E-02	9 4.62E-02	10 8.19E-02
		11 1.51E-01	12 1.18E-01	13 6.97E-02	14 3.77E-02	15 2.37E-02
		16 7.50E-04	-1			
103	621570	1 4.20E-02	3 8.21E-02	4 9.05E-02	5 2.21E-02	6 4.76E-02
		7 7.86E-01	8 1.40E-01	9 3.80E-02	10 5.85E-02	11 8.35E-02
		-1				
103	631570	1 1.39E-01	3 3.07E-01	4 5.83E-01	5 2.11E-03	6 1.08E-03
		7 6.03E-03	8 3.85E-01	9 1.40E-01	10 1.66E-02	11 1.17E-03
		-1				
103	591580	1 8.80E-04	2 4.40E-04	3 6.60E-04	4 1.10E-03	5 1.32E-03
		6 4.56E-03	7 1.88E-02	8 3.25E-02	9 8.24E-02	10 1.46E-01
		11 2.77E-01	12 2.79E-01	13 2.42E-01	14 1.81E-01	15 1.96E-01
		16 8.48E-02	17 4.46E-03	18 7.33E-05	-1	
103	601580	1 4.95E-04	2 2.47E-04	3 3.71E-04	4 6.19E-04	5 7.42E-04
		6 2.57E-03	7 1.06E-02	8 1.83E-02	9 4.63E-02	10 8.22E-02
		11 1.51E-01	12 1.18E-01	13 7.85E-02	14 4.53E-02	15 3.29E-02
		16 3.29E-03	-1			
103	611580	1 9.63E-04	2 4.81E-04	3 7.22E-04	4 1.20E-03	5 1.44E-03
		6 4.99E-03	7 2.06E-02	8 3.56E-02	9 9.01E-02	10 1.60E-01
		11 2.99E-01	12 2.60E-01	13 1.84E-01	14 1.13E-01	15 9.31E-02
		16 2.17E-02	-1			
103	621580	1 8.92E-04	2 4.46E-04	3 6.69E-04	4 1.11E-03	5 1.34E-03
		6 4.63E-03	7 1.91E-02	8 3.30E-02	9 8.34E-02	10 1.48E-01
		11 2.46E-01	12 3.54E-02	-1		
103	631580	1 1.02E-01	3 1.09E-01	4 1.09E-01	5 1.10E-01	7 2.07E-02
		9 5.46E-02	10 6.63E-01	11 2.17E-01	12 3.58E-02	13 3.72E-02
		14 3.13E-03	-1			
103	591590	1 6.87E-04	2 3.44E-04	3 5.15E-04	4 8.59E-04	5 1.03E-03
		6 3.56E-03	7 1.47E-02	8 2.54E-02	9 6.43E-02	10 1.14E-01
		11 2.15E-01	12 2.11E-01	13 1.82E-01	14 1.35E-01	15 1.42E-01
		16 5.84E-02	17 3.00E-03	18 2.84E-05	-1	
103	601590	1 6.33E-04	2 3.17E-04	3 4.75E-04	4 7.92E-04	5 9.50E-04
		6 3.29E-03	7 1.35E-02	8 2.34E-02	9 5.93E-02	10 1.05E-01
		11 1.97E-01	12 1.81E-01	13 1.42E-01	14 9.29E-02	15 8.34E-02
		16 2.45E-02	17 1.61E-04	-1		
103	611590	1 5.10E-04	2 2.55E-04	3 3.83E-04	4 6.38E-04	5 7.65E-04
		6 2.65E-03	7 1.09E-02	8 1.89E-02	9 4.77E-02	10 8.47E-02
		11 1.57E-01	12 1.38E-01	13 1.03E-01	14 6.41E-02	15 4.92E-02
		16 9.33E-03	-1			
103	621590	1 6.85E-04	2 3.42E-04	3 5.13E-04	4 8.56E-04	5 1.03E-03
		6 3.55E-03	7 1.46E-02	8 2.53E-02	9 6.41E-02	10 1.14E-01
		11 2.05E-01	12 1.44E-01	13 8.19E-02	14 3.68E-02	15 8.93E-03
		-1				
103	631590	1 3.77E-04	2 1.89E-04	3 2.83E-04	4 4.72E-04	5 5.66E-04
		6 1.96E-03	7 8.07E-03	8 1.40E-02	9 3.53E-02	10 6.27E-02
		11 1.11E-01	12 6.91E-02	13 2.81E-02	14 1.44E-03	-1
103	641590	1 4.00E-02	3 7.40E-02	4 1.33E-01	5 4.59E-04	6 6.05E-05
		7 2.66E-03	8 1.13E-01	9 1.02E-03	10 1.68E-06	-1
103	601600	1 5.07E-04	2 2.54E-04	3 3.81E-04	4 6.34E-04	5 7.61E-04
		6 2.63E-03	7 1.08E-02	8 1.88E-02	9 4.75E-02	10 8.43E-02
		11 1.56E-01	12 1.35E-01	13 1.00E-01	14 6.50E-02	15 5.75E-02
		16 1.56E-02	17 1.72E-08	-1		
103	611600	1 8.56E-04	2 4.28E-04	3 6.42E-04	4 1.07E-03	5 1.28E-03
		6 4.44E-03	7 1.83E-02	8 3.17E-02	9 8.01E-02	10 1.42E-01
		11 2.68E-01	12 2.55E-01	13 2.05E-01	14 1.41E-01	15 1.37E-01

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		16	4.78E-02	17	9.64E-04	-1			
103	621600	1	5.87E-04	2	2.93E-04	3	4.40E-04	4	7.33E-04
		6	3.04E-03	7	1.25E-02	8	2.17E-02	9	5.49E-02
		11	1.75E-01	12	1.14E-01	13	5.39E-02	14	1.03E-02
103	631600	5	2.40E-01	7	1.00E+00	8	5.60E-01	9	6.00E-01
		11	6.10E-01	-1				10	1.15E+00
103	651600	1	1.05E-01	3	8.34E-02	4	1.26E-01	5	1.31E-01
		8	2.59E-02	9	6.98E-03	10	6.75E-01	11	3.12E-01
103	601610	1	6.69E-04	2	3.34E-04	3	5.01E-04	4	8.36E-04
		6	3.47E-03	7	1.43E-02	8	2.47E-02	9	6.26E-02
		11	2.08E-01	12	1.95E-01	13	1.55E-01	14	1.05E-01
		16	3.35E-02	17	6.08E-04	-1			
103	611610	1	6.46E-04	2	3.23E-04	3	4.85E-04	4	8.08E-04
		6	3.35E-03	7	1.38E-02	8	2.39E-02	9	6.05E-02
		11	2.01E-01	12	1.85E-01	13	1.44E-01	14	9.39E-02
		16	2.51E-02	17	2.36E-04	-1			
103	621610	1	6.10E-04	2	3.05E-04	3	4.58E-04	4	7.63E-04
		6	3.17E-03	7	1.30E-02	8	2.26E-02	9	5.71E-02
		11	1.86E-01	12	1.46E-01	13	9.69E-02	14	5.56E-02
		16	4.21E-03	-1					
103	631610	1	7.11E-04	2	3.55E-04	3	5.33E-04	4	8.88E-04
		6	3.69E-03	7	1.52E-02	8	2.63E-02	9	6.65E-02
		11	2.13E-01	12	1.50E-01	13	8.51E-02	14	3.87E-02
		-1						15	1.07E-03
103	641610	1	1.28E-01	3	2.35E-01	4	3.93E-01	5	1.52E-02
		7	1.18E-01	8	8.51E-01	9	3.99E-02	10	2.99E-04
		12	6.51E-05	-1				11	8.60E-04
103	651610	1	1.47E-01	2	2.32E-01	3	1.76E-01	4	2.41E-01
		6	1.79E-03	7	5.81E-04	8	1.63E-04	9	5.52E-04
103	611620	1	8.62E-04	2	4.31E-04	3	6.47E-04	4	1.08E-03
		6	4.47E-03	7	1.84E-02	8	3.19E-02	9	8.07E-02
		11	2.70E-01	12	2.59E-01	13	2.10E-01	14	1.48E-01
		16	5.39E-02	17	1.54E-03	-1			
103	621620	1	5.31E-04	2	2.66E-04	3	3.99E-04	4	6.64E-04
		6	2.76E-03	7	1.14E-02	8	1.96E-02	9	4.97E-02
		11	1.59E-01	12	1.17E-01	13	7.42E-02	14	4.05E-02
		16	3.88E-04	-1				15	2.51E-02
103	631620	1	8.31E-04	2	4.15E-04	3	6.23E-04	4	1.04E-03
		6	4.31E-03	7	1.78E-02	8	3.07E-02	9	7.77E-02
		11	2.58E-01	12	2.32E-01	13	1.72E-01	14	1.08E-01
		16	2.32E-02	-1				15	9.66E-02
103	641620	1	6.25E-02	2	2.39E-04	3	4.00E-02	4	3.89E-03
		6	2.48E-03	7	1.02E-02	8	7.43E-01	9	4.48E-02
		11	8.96E-02	-1				10	7.95E-02
103	651620	1	9.30E-02	3	6.75E-02	4	1.02E-01	5	8.65E-02
		8	1.63E-05	9	3.58E-02	10	9.50E-01	11	8.47E-03
		13	7.37E-04	-1				12	3.55E-03
103									



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103	651630	1	4.80E-02	3	3.50E-02	4	5.29E-02	5	2.34E-02	6	5.02E-03
		7	1.07E-01	8	1.07E+00	9	6.36E-01	10	2.25E-02	-1	
103	621640	1	4.95E-04	2	2.47E-04	3	3.71E-04	4	6.19E-04	5	7.42E-04
		6	2.57E-03	7	1.06E-02	8	1.83E-02	9	4.63E-02	10	8.22E-02
		11	1.52E-01	12	1.25E-01	13	8.84E-02	14	5.45E-02	15	4.45E-02
		16	8.62E-03	-1							
103	631640	1	8.30E-04	2	4.15E-04	3	6.22E-04	4	1.04E-03	5	1.24E-03
		6	4.31E-03	7	1.77E-02	8	3.07E-02	9	7.77E-02	10	1.38E-01
		11	2.58E-01	12	2.36E-01	13	1.80E-01	14	1.18E-01	15	1.10E-01
		16	3.05E-02	-1							
103	641640	1	6.58E-04	2	3.29E-04	3	4.94E-04	4	8.23E-04	5	9.88E-04
		6	3.42E-03	7	1.41E-02	8	2.43E-02	9	6.16E-02	10	1.09E-01
		11	1.90E-01	12	1.08E-01	13	3.74E-02	14	6.55E-07	-1	
103	651640	1	1.54E-01	3	1.14E-01	4	1.67E-01	5	9.54E-02	6	6.47E-02
		7	7.74E-01	8	1.71E-01	9	9.42E-01	10	7.82E-01	11	4.70E-01
		12	5.83E-02	13	4.05E-02	14	4.22E-02	-1			
103	621650	1	6.51E-04	2	3.26E-04	3	4.88E-04	4	8.14E-04	5	9.77E-04
		6	3.38E-03	7	1.39E-02	8	2.41E-02	9	6.10E-02	10	1.08E-01
		11	2.03E-01	12	1.85E-01	13	1.43E-01	14	9.31E-02	15	8.49E-02
		16	2.47E-02	17	7.82E-05	-1					
103	631650	1	5.88E-04	2	2.94E-04	3	4.41E-04	4	7.35E-04	5	8.82E-04
		6	3.05E-03	7	1.26E-02	8	2.17E-02	9	5.50E-02	10	9.77E-02
		11	1.82E-01	12	1.64E-01	13	1.23E-01	14	7.56E-02	15	6.40E-02
		16	1.52E-02	-1							
103	641650	1	5.55E-04	2	2.78E-04	3	4.17E-04	4	6.94E-04	5	8.33E-04
		6	2.88E-03	7	1.19E-02	8	2.05E-02	9	5.20E-02	10	9.22E-02
		11	1.68E-01	12	1.24E-01	13	7.56E-02	14	3.92E-02	15	1.89E-02
		-1									
103	651650	4	5.63E-02	7	6.08E-02	9	1.43E-01	10	3.65E-02	11	4.03E-01
		12	1.28E-01	-1							
103	661650	1	2.20E-02	2	4.20E-05	3	3.70E-02	4	5.65E-02	5	3.60E-02
		6	1.64E-04	7	5.22E-03	8	8.51E-03	9	1.26E-02	10	6.14E-03
		11	1.26E-03	-1							
103	661651	1	1.53E-01	3	3.87E-02	4	5.85E-02	6	3.00E-02	8	5.34E-03
		-1									
103	661660	1	1.95E-01	2	1.13E-02	3	2.02E-01	4	3.15E-01	5	1.38E-01
		7	1.38E-04	8	1.16E-02	-1					
103	671660	1	8.30E-02	3	4.30E-02	4	6.55E-02	5	6.71E-02	7	2.00E-05
		9	1.94E-04	10	2.50E-04	11	9.31E-03	12	3.43E-03	-1	
103	671661	1	2.09E-01	3	1.51E-01	4	2.31E-01	5	1.25E-01	6	5.64E-03
		7	1.07E+00	8	1.80E-01	9	2.89E-01	10	1.43E+00	11	2.54E-02
		12	1.60E-04	-1							
103	681671	1	1.06E-01	3	7.51E-02	4	1.14E-01	7	4.17E-01	-1	
103	681690	1	1.58E-03	4	1.30E-05	6	1.30E-05	-1			
103	701690	1	5.13E-01	2	1.90E-03	3	2.66E-01	4	2.04E+00	5	2.61E-02
		6	3.10E-01	7	5.98E-01	8	1.03E-01	9	1.06E-04	10	5.66E-08
		-1									
103	691700	1	3.13E-02	3	4.05E-04	4	3.45E-02	5	2.48E-02	-1	
103	681710	1	1.46E-01	3	6.60E-02	4	3.95E-01	5	6.00E-04	6	3.19E-01
		7	3.06E-01	8	6.48E-01	9	8.56E-03	10	1.85E-02	11	1.81E-04
		-1									
103	691710	1	3.60E-03	4	1.05E-02	-1					
103	681720	1	9.20E-02	2	7.58E-05	3	4.61E-02	4	3.36E-01	5	1.30E-03
		6	2.14E-02	7	1.73E-02	8	4.81E-01	9	1.38E-02	10	1.35E-04
		-1									
103	691720	1	1.08E-01	4	1.04E-01	5	6.56E-02	6	1.12E-03	7	2.79E-02
		8	4.18E-03	9	5.87E-03	10	1.90E-02	11	2.15E-01	12	9.89E-02
		-1									

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## Appendix B: Decay Data Library

The updated ORIGEN2 decay data library of FP nuclides is listed here.

DECAY LIBRARY: FISSION PRODUCTS (2/8 J. KATAKURA)								
3	10030	1	3.897E+08	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.680E-03	0.0	2.000E-07	3.000E-03
3	30060	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.500E+00	1.000E+00	1.000E+00
3	30070	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	9.250E+01	1.000E+00	1.000E+00
3	40090	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	40100	1	5.049E+13	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.025E-01	0.0	1.000E-10	3.000E-06
3	60140	1	1.808E+11	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.947E-02	0.0	1.000E-07	8.000E-04
3	280660	1	1.966E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.500E-02	0.0	1.000E-10	3.000E-06
3	290660	1	3.053E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.154E+00	0.0	3.000E-08	1.000E+00
3	300660	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.790E+01	1.000E+00	1.000E+00
3	290670	1	2.226E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.710E-01	0.0	1.000E-10	3.000E-06
3	300670	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.100E+00	1.000E+00	1.000E+00
3	300680	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.878E+01	1.000E+00	1.000E+00
3	300690	1	3.380E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.214E-01	0.0	2.000E-07	2.000E-03
3	300691	1	4.954E+04	0.0	0.0	0.0	0.0	9.997E-01
3			0.0	0.0	4.381E-01	0.0	1.000E-08	6.000E-05
3	310690	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	6.010E+01	1.000E+00	1.000E+00
3	300700	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	6.200E-01	1.000E+00	1.000E+00
3	310700	1	1.268E+03	0.0	4.100E-03	0.0	0.0	0.0
3			0.0	0.0	6.513E-01	0.0	3.000E-08	1.000E+00
3	320700	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.050E+01	1.000E+00	1.000E+00
3	300710	1	1.470E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.363E+00	0.0	3.000E-08	1.000E+00
3	300711	1	1.426E+04	0.0	0.0	0.0	0.0	5.000E-04
3			0.0	0.0	2.097E+00	0.0	1.000E-10	3.000E-06
3	310710	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.990E+01	1.000E+00	1.000E+00
3	320710	1	9.880E+05	0.0	1.000E+00	0.0	0.0	0.0
3			0.0	0.0	8.990E-03	0.0	2.000E-07	2.000E-03
3	320711	1	2.190E-02	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.960E-01	0.0	3.000E-08	1.000E+00
3	270720	1	7.896E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.302E+00	0.0	3.000E-08	1.000E+00
3	280720	1	7.843E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.795E+00	0.0	3.000E-08	1.000E+00
3	290720	1	6.600E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.029E+00	0.0	3.000E-08	1.000E+00
3	300720	1	1.674E+05	0.0	0.0	0.0	0.0	0.0

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3			0.0	0.0	2.551E-01	0.0	1.000E-10	3.000E-06
3	310720	1	5.076E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.213E+00	0.0	6.000E-09	4.000E-05
3	320720	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.740E+01	1.000E+00	1.000E+00
3	270730	1	5.985E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.698E+00	0.0	3.000E-08	1.000E+00
3	280730	1	1.262E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.900E+00	0.0	3.000E-08	1.000E+00
3	290730	1	3.900E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.757E+00	0.0	3.000E-08	1.000E+00
3	300730	1	2.350E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.714E+00	0.0	3.000E-08	1.000E+00
3	310730	1	1.750E+04	9.960E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	7.880E-01	0.0	1.000E-10	3.000E-06
3	320730	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.800E+00	1.000E+00	1.000E+00
3	320731	1	4.990E-01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	6.383E-02	0.0	3.000E-08	1.000E+00
3	270740	1	3.735E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.059E+01	0.0	3.000E-08	1.000E+00
3	280740	1	1.437E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.882E+00	0.0	3.000E-08	1.000E+00
3	290740	1	4.985E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.717E+00	0.0	3.000E-08	1.000E+00
3	300740	1	9.500E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.437E+00	0.0	3.000E-08	1.000E+00
3	310740	1	4.870E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.020E+00	0.0	3.000E-08	1.000E+00
3	320740	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.650E+01	1.000E+00	1.000E+00
3	270750	1	3.084E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.004E+00	0.0	3.000E-08	1.000E+00
3	280750	1	1.647E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.043E+00	0.0	3.000E-08	1.000E+00
3	290750	1	1.300E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	3.500E-02	3.778E+00	0.0	3.000E-08	1.000E+00
3	300750	1	1.020E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.553E+00	0.0	3.000E-08	1.000E+00
3	310750	1	1.260E+02	7.100E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.624E+00	0.0	3.000E-08	1.000E+00
3	320750	1	4.967E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.560E-01	0.0	3.000E-08	1.000E+00
3	320751	1	4.770E+01	0.0	0.0	0.0	0.0	9.997E-01
3			0.0	0.0	1.339E-01	0.0	3.000E-08	1.000E+00
3	330750	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	280760	1	1.257E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.906E+00	0.0	3.000E-08	1.000E+00
3	290760	1	1.574E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	3.000E-02	6.617E+00	0.0	3.000E-08	1.000E+00
3	300760	1	5.700E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.152E+00	0.0	3.000E-08	1.000E+00
3	310760	1	3.260E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.600E+00	0.0	3.000E-08	1.000E+00
3	320760	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.800E+00	1.000E+00	1.000E+00
3	330760	1	9.312E+04	0.0	2.000E-04	0.0	0.0	0.0
3			0.0	0.0	1.487E+00	0.0	3.000E-09	2.000E-05

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3	340760	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	9.030E+00	1.000E+00	1.000E+00
3	280770	1	6.503E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.569E+00	0.0	3.000E-08	1.000E+00
3	290770	1	1.260E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.773E+00	0.0	3.000E-08	1.000E+00
3	300770	1	2.080E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.480E+00	0.0	3.000E-08	1.000E+00
3	310770	1	1.300E+01	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.832E+00	0.0	3.000E-08	1.000E+00
3	320770	1	4.068E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.721E+00	0.0	1.000E-10	3.000E-06
3	320771	1	5.290E+01	0.0	0.0	0.0	0.0	1.900E-01
3			0.0	0.0	1.090E+00	0.0	3.000E-08	1.000E+00
3	330770	1	1.398E+05	7.900E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	2.341E-01	0.0	1.000E-10	3.000E-06
3	340770	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.600E+00	1.000E+00	1.000E+00
3	340771	1	1.736E+01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.585E-01	0.0	3.000E-08	1.000E+00
3	280780	1	5.058E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.806E+00	0.0	3.000E-08	1.000E+00
3	290780	1	4.638E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.883E+00	0.0	3.000E-08	1.000E+00
3	300780	1	1.470E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	9.000E-05	3.890E+00	0.0	3.000E-08	1.000E+00
3	310780	1	5.090E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.140E+00	0.0	3.000E-08	1.000E+00
3	320780	1	5.280E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.050E-01	0.0	3.000E-08	1.000E+00
3	330780	1	5.442E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.570E+00	0.0	1.000E-08	8.000E-05
3	340780	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.350E+01	1.000E+00	1.000E+00
3	290790	1	5.492E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.679E+00	0.0	3.000E-08	1.000E+00
3	300790	1	9.950E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.200E-02	5.933E+00	0.0	3.000E-08	1.000E+00
3	310790	1	2.847E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.000E-03	4.530E+00	0.0	3.000E-08	1.000E+00
3	320790	1	1.910E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.117E+00	0.0	3.000E-08	1.000E+00
3	330790	1	5.410E+02	9.790E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	8.728E-01	0.0	3.000E-08	1.000E+00
3	340790	1	2.051E+13	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.580E-02	0.0	1.000E-10	3.000E-06
3	340791	1	2.352E+02	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	9.700E-02	0.0	3.000E-08	1.000E+00
3	350790	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.069E+01	1.000E+00	1.000E+00
3	350791	1	4.860E+00	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.068E-01	0.0	3.000E-08	1.000E+00
3	290800	1	4.129E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.914E+00	0.0	3.000E-08	1.000E+00
3	300800	1	5.450E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.370E-02	4.300E+00	0.0	3.000E-08	1.000E+00
3	310800	1	1.697E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	8.600E-03	6.670E+00	0.0	3.000E-08	1.000E+00
3	320800	1	2.950E+01	0.0	0.0	0.0	0.0	0.0

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3			0.0	0.0	1.435E+00	0.0	3.000E-08	1.000E+00
3	330800	1	1.520E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.730E+00	0.0	3.000E-08	1.000E+00
3	340800	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.980E+01	1.000E+00	1.000E+00
3	350800	1	1.061E+03	0.0	8.300E-02	0.0	0.0	0.0
3			0.0	0.0	7.986E-01	0.0	3.000E-08	1.000E+00
3	350801	1	1.591E+04	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	8.370E-02	0.0	1.000E-10	3.000E-06
3	360800	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.250E+00	1.000E+00	1.000E+00
3	290810	1	2.198E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.283E+00	0.0	3.000E-08	1.000E+00
3	300810	1	2.671E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.745E+00	0.0	3.000E-08	1.000E+00
3	310810	1	1.221E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.220E-01	4.480E+00	0.0	3.000E-08	1.000E+00
3	320810	1	7.600E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.630E+00	0.0	3.000E-08	1.000E+00
3	330810	1	3.330E+01	8.900E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.806E+00	0.0	3.000E-08	1.000E+00
3	340810	1	1.107E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.190E-01	0.0	3.000E-08	1.000E+00
3	340811	1	3.437E+03	0.0	0.0	0.0	0.0	9.995E-01
3			0.0	0.0	1.022E-01	0.0	3.000E-08	1.000E+00
3	350810	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.931E+01	1.000E+00	1.000E+00
3	360810	1	7.200E+12	0.0	1.000E+00	0.0	0.0	0.0
3			0.0	0.0	1.203E-02	0.0	1.000E-10	3.000E-06
3	360811	1	1.310E+01	0.0	2.500E-05	0.0	0.0	1.000E+00
3			0.0	0.0	1.873E-01	0.0	3.000E-08	1.000E+00
3	300820	1	3.571E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.415E+00	0.0	3.000E-08	1.000E+00
3	310820	1	6.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.190E-01	7.927E+00	0.0	3.000E-08	1.000E+00
3	320820	1	4.600E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.214E+00	0.0	3.000E-08	1.000E+00
3	330820	1	1.910E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.002E+00	0.0	3.000E-08	1.000E+00
3	330821	1	1.360E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.610E+00	0.0	3.000E-08	1.000E+00
3	340820	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	9.200E+00	1.000E+00	1.000E+00
3	350820	1	1.271E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.785E+00	0.0	6.000E-09	4.000E-05
3	350821	1	3.680E+02	0.0	0.0	0.0	0.0	9.760E-01
3			0.0	0.0	7.226E-02	0.0	3.000E-08	1.000E+00
3	360820	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.160E+01	1.000E+00	1.000E+00
3	300830	1	3.284E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.055E+00	0.0	3.000E-08	1.000E+00
3	310830	1	3.100E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	4.400E-01	7.624E+00	0.0	3.000E-08	1.000E+00
3	320830	1	1.850E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.000E-05	5.133E+00	0.0	3.000E-08	1.000E+00
3	330830	1	1.330E+01	6.340E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	4.007E+00	0.0	3.000E-08	1.000E+00
3	340830	1	1.340E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.110E+00	0.0	3.000E-08	1.000E+00

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3	340831	1	7.010E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.255E+00	0.0	3.000E-08	1.000E+00
3	350830	1	8.640E+03	9.998E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.320E-01	0.0	1.000E-10	3.000E-06
3	360830	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.150E+01	1.000E+00	1.000E+00
3	360831	1	6.590E+03	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	4.187E-02	0.0	3.000E-08	1.000E+00
3	310840	1	2.216E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.900E-01	8.861E+00	0.0	3.000E-08	1.000E+00
3	320840	1	1.200E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	4.900E-02	5.006E+00	0.0	3.000E-08	1.000E+00
3	330840	1	5.500E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	8.500E-04	5.982E+00	0.0	3.000E-08	1.000E+00
3	340840	1	1.860E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.560E-01	0.0	3.000E-08	1.000E+00
3	350840	1	1.908E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.000E+00	0.0	3.000E-08	1.000E+00
3	350841	1	3.600E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.680E+00	0.0	3.000E-08	1.000E+00
3	360840	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.700E+01	1.000E+00	1.000E+00
3	310850	1	3.283E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.814E+00	0.0	3.000E-08	1.000E+00
3	320850	1	7.758E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.200E-01	6.212E+00	0.0	3.000E-08	1.000E+00
3	330850	1	2.080E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	5.000E-01	5.841E+00	0.0	3.000E-08	1.000E+00
3	340850	1	3.170E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.784E+00	0.0	3.000E-08	1.000E+00
3	340851	1	1.900E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.494E+00	0.0	3.000E-08	1.000E+00
3	350850	1	1.740E+02	9.982E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.107E+00	0.0	3.000E-08	1.000E+00
3	360850	1	3.394E+08	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.529E-01	0.0	3.000E-07	1.000E+00
3	360851	1	1.613E+04	0.0	0.0	0.0	0.0	2.140E-01
3			0.0	0.0	4.121E-01	0.0	1.000E-07	1.000E+00
3	370850	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.217E+01	1.000E+00	1.000E+00
3	320860	1	7.569E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	1.300E-01	5.998E+00	0.0	3.000E-08	1.000E+00
3	330860	1	9.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.200E-01	7.095E+00	0.0	3.000E-08	1.000E+00
3	340860	1	1.530E+01	5.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.730E+00	0.0	3.000E-08	1.000E+00
3	350860	1	5.500E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.200E+00	0.0	3.000E-08	1.000E+00
3	350861	1	4.500E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.752E+00	0.0	3.000E-08	1.000E+00
3	360860	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.730E+01	1.000E+00	1.000E+00
3	370860	1	1.610E+06	0.0	5.200E-05	0.0	0.0	0.0
3			0.0	0.0	7.612E-01	0.0	2.000E-09	2.000E-05
3	370861	1	6.102E+01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	5.557E-01	0.0	3.000E-08	1.000E+00
3	380860	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	9.840E+00	1.000E+00	1.000E+00
3	320870	1	7.462E-02	0.0	0.0	0.0	0.0	0.0

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3			0.0	2.400E-01	7.118E+00	0.0	3.000E-08	1.000E+00
3	330870	1	7.300E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	4.200E-01	6.913E+00	0.0	3.000E-08	1.000E+00
3	340870	1	5.850E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.800E-03	4.723E+00	0.0	3.000E-08	1.000E+00
3	350870	1	5.569E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.580E-02	4.860E+00	0.0	3.000E-08	1.000E+00
3	360870	1	4.580E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.121E+00	0.0	2.000E-08	1.000E+00
3	370870	1	1.499E+18	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.170E-02	2.783E+01	2.000E-09	1.000E-04
3	380870	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.000E+00	1.000E+00	1.000E+00
3	380871	1	1.009E+04	0.0	3.000E-03	0.0	0.0	9.970E-01
3			0.0	0.0	3.860E-01	0.0	1.000E-10	3.000E-06
3	320880	1	3.149E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.009E+00	0.0	3.000E-08	1.000E+00
3	330880	1	1.599E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.000E-01	7.973E+00	0.0	3.000E-08	1.000E+00
3	340880	1	1.530E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	9.400E-03	4.247E+00	0.0	3.000E-08	1.000E+00
3	350880	1	1.650E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	6.350E-02	5.830E+00	0.0	3.000E-08	1.000E+00
3	360880	1	1.022E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.320E+00	0.0	2.000E-08	1.000E+00
3	370880	1	1.067E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.707E+00	0.0	3.000E-08	1.000E+00
3	380880	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	8.260E+01	1.000E+00	1.000E+00
3	330890	1	4.822E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.920E+00	0.0	3.000E-08	1.000E+00
3	340890	1	4.100E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	7.500E-02	5.020E+00	0.0	3.000E-08	1.000E+00
3	350890	1	4.400E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.420E-01	5.141E+00	0.0	3.000E-08	1.000E+00
3	360890	1	1.890E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.313E+00	0.0	3.000E-08	1.000E+00
3	370890	1	9.090E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.130E+00	0.0	3.000E-08	1.000E+00
3	380890	1	4.366E+06	1.500E-04	0.0	0.0	0.0	0.0
3			0.0	0.0	5.846E-01	0.0	3.000E-10	3.000E-06
3	390890	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	390891	1	1.606E+01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	9.088E-01	0.0	3.000E-08	1.000E+00
3	330900	1	3.672E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.977E+00	0.0	3.000E-08	1.000E+00
3	340900	1	1.456E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	7.200E-02	5.537E+00	0.0	3.000E-08	1.000E+00
3	350900	1	1.920E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.490E-01	5.804E+00	0.0	3.000E-08	1.000E+00
3	360900	1	3.232E+01	1.220E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.690E+00	0.0	3.000E-08	1.000E+00
3	370900	1	1.580E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.156E+00	0.0	3.000E-08	1.000E+00
3	370901	1	2.580E+02	0.0	0.0	0.0	0.0	2.600E-02
3			0.0	0.0	4.683E+00	0.0	3.000E-08	1.000E+00
3	380900	1	9.070E+08	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.958E-01	0.0	3.000E-11	3.000E-07

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3	390900	1	2.308E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.338E-01	0.0	3.000E-09	2.000E-05
3	390901	1	1.148E+04	1.880E-03	0.0	0.0	0.0	9.981E-01
3			0.0	0.0	6.862E-01	0.0	1.000E-10	3.000E-06
3	400900	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.150E+01	1.000E+00	1.000E+00
3	400901	1	8.092E-01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.300E+00	0.0	3.000E-08	1.000E+00
3	340910	1	2.700E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.200E-01	6.911E+00	0.0	3.000E-08	1.000E+00
3	350910	1	5.420E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.830E-01	5.556E+00	0.0	3.000E-08	1.000E+00
3	360910	1	8.570E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.950E+00	0.0	3.000E-08	1.000E+00
3	370910	1	5.840E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.840E+00	0.0	3.000E-08	1.000E+00
3	380910	1	3.467E+04	8.900E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.350E+00	0.0	9.000E-09	5.000E-05
3	390910	1	5.055E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.070E-01	0.0	1.000E-09	3.000E-05
3	390911	1	2.983E+03	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	5.547E-01	0.0	6.000E-07	3.000E-03
3	400910	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.120E+01	1.000E+00	1.000E+00
3	340920	1	6.857E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.350E+00	0.0	3.000E-08	1.000E+00
3	350920	1	3.620E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.200E-01	7.205E+00	0.0	3.000E-08	1.000E+00
3	360920	1	1.840E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	3.200E-04	3.400E+00	0.0	3.000E-08	1.000E+00
3	370920	1	4.492E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.000E-04	4.019E+00	0.0	3.000E-08	1.000E+00
3	380920	1	9.760E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.520E+00	0.0	1.000E-08	6.000E-05
3	390920	1	1.274E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.692E+00	0.0	1.000E-08	6.000E-05
3	400920	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.710E+01	1.000E+00	1.000E+00
3	340930	1	5.465E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.259E+00	0.0	3.000E-08	1.000E+00
3	350930	1	2.975E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.400E-01	7.226E+00	0.0	3.000E-08	1.000E+00
3	360930	1	1.286E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.930E-02	4.777E+00	0.0	3.000E-08	1.000E+00
3	370930	1	5.840E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.360E-02	4.414E+00	0.0	3.000E-08	1.000E+00
3	380930	1	4.454E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.000E+00	0.0	3.000E-08	1.000E+00
3	390930	1	3.660E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.263E+00	0.0	5.000E-09	3.000E-05
3	400930	1	4.800E+13	9.500E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.920E-02	0.0	4.000E-09	8.000E-04
3	410930	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	410931	1	5.090E+08	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.876E-02	0.0	4.000E-09	4.000E-04
3	350940	1	2.435E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.680E+00	0.0	3.000E-08	1.000E+00
3	360940	1	2.080E-01	0.0	0.0	0.0	0.0	0.0



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3			0.0	6.100E-02	4.427E+00	0.0	3.000E-08	1.000E+00
3	370940	1	2.702E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.020E-01	6.376E+00	0.0	3.000E-08	1.000E+00
3	380940	1	7.520E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.306E+00	0.0	3.000E-08	1.000E+00
3	390940	1	1.122E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.580E+00	0.0	3.000E-08	1.000E+00
3	400940	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.740E+01	1.000E+00	1.000E+00
3	410940	1	6.400E+11	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.701E+00	0.0	1.000E-10	3.000E-06
3	410941	1	3.756E+02	0.0	0.0	0.0	0.0	9.950E-01
3			0.0	0.0	4.300E-02	0.0	3.000E-08	1.000E+00
3	350950	1	5.425E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.306E+00	0.0	3.000E-08	1.000E+00
3	360950	1	7.800E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.200E-01	6.410E+00	0.0	3.000E-08	1.000E+00
3	370950	1	3.775E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	8.590E-02	4.989E+00	0.0	3.000E-08	1.000E+00
3	380950	1	2.390E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.745E+00	0.0	3.000E-08	1.000E+00
3	390950	1	6.180E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.550E+00	0.0	3.000E-08	1.000E+00
3	400950	1	5.531E+06	9.000E-03	0.0	0.0	0.0	0.0
3			0.0	0.0	8.504E-01	0.0	1.000E-09	6.000E-05
3	410950	1	3.022E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.091E-01	0.0	3.000E-09	1.000E-04
3	410951	1	3.120E+05	0.0	0.0	0.0	0.0	9.440E-01
3			0.0	0.0	2.756E-01	0.0	1.000E-10	3.000E-06
3	420950	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.590E+01	1.000E+00	1.000E+00
3	350960	1	4.924E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.291E+00	0.0	3.000E-08	1.000E+00
3	360960	1	1.338E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.100E-01	4.639E+00	0.0	3.000E-08	1.000E+00
3	370960	1	1.990E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.420E-01	6.744E+00	0.0	3.000E-08	1.000E+00
3	380960	1	1.060E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.324E+00	0.0	3.000E-08	1.000E+00
3	390960	1	5.340E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.862E+00	0.0	3.000E-08	1.000E+00
3	400960	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.800E+00	1.000E+00	1.000E+00
3	410960	1	8.406E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.710E+00	0.0	1.000E-10	3.000E-06
3	420960	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.670E+01	1.000E+00	1.000E+00
3	360970	1	1.164E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.827E+00	0.0	3.000E-08	1.000E+00
3	370970	1	1.699E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.690E-01	5.901E+00	0.0	3.000E-08	1.000E+00
3	380970	1	4.260E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	6.000E-05	4.295E+00	0.0	3.000E-08	1.000E+00
3	390970	1	3.750E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	6.100E-04	3.823E+00	0.0	3.000E-08	1.000E+00
3	400970	1	6.088E+04	9.500E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	8.890E-01	0.0	3.000E-09	2.000E-05
3	410970	1	4.330E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.133E+00	0.0	2.000E-07	9.000E-04

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3	410971	1	5.270E+01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	7.427E-01	0.0	3.000E-08	1.000E+00
3	420970	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	9.600E+00	1.000E+00	1.000E+00
3	360980	1	7.168E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.343E+00	0.0	3.000E-08	1.000E+00
3	370980	1	1.140E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.340E-01	6.634E+00	0.0	3.000E-08	1.000E+00
3	380980	1	6.530E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.200E-03	3.190E+00	0.0	3.000E-08	1.000E+00
3	390980	1	5.480E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.100E-03	5.082E+00	0.0	3.000E-08	1.000E+00
3	400980	1	3.070E+01	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	1.071E+00	0.0	3.000E-08	1.000E+00
3	410980	1	2.860E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.483E+00	0.0	3.000E-08	1.000E+00
3	410981	1	3.078E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.575E+00	0.0	3.000E-08	1.000E+00
3	420980	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.410E+01	1.000E+00	1.000E+00
3	370990	1	5.900E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	1.310E-01	6.320E+00	0.0	3.000E-08	1.000E+00
3	380990	1	2.700E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.300E-03	5.306E+00	0.0	3.000E-08	1.000E+00
3	390990	1	1.470E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	9.600E-03	3.522E+00	0.0	3.000E-08	1.000E+00
3	400990	1	2.100E+00	3.600E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.554E+00	0.0	3.000E-08	1.000E+00
3	410990	1	1.500E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.896E+00	0.0	3.000E-08	1.000E+00
3	410991	1	1.560E+02	0.0	0.0	0.0	0.0	3.900E-02
3			0.0	0.0	2.898E+00	0.0	3.000E-08	1.000E+00
3	420990	1	2.374E+05	8.700E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.425E-01	0.0	7.000E-09	4.000E-05
3	430990	1	6.660E+12	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.460E-02	0.0	2.000E-09	2.000E-04
3	430991	1	2.164E+04	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.416E-01	0.0	5.000E-07	3.000E-03
3	440990	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.270E+01	1.000E+00	1.000E+00
3	371000	1	1.747E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	6.000E-02	8.950E+00	0.0	3.000E-08	1.000E+00
3	381000	1	2.020E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	7.300E-03	3.806E+00	0.0	3.000E-08	1.000E+00
3	391000	1	7.350E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	8.100E-03	5.931E+00	0.0	3.000E-08	1.000E+00
3	401000	1	7.100E+00	2.000E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.812E+00	0.0	3.000E-08	1.000E+00
3	411000	1	1.500E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.190E+00	0.0	3.000E-08	1.000E+00
3	411001	1	2.990E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.893E+00	0.0	3.000E-08	1.000E+00
3	421000	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	9.600E+00	1.000E+00	1.000E+00
3	431000	1	1.580E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.398E+00	0.0	3.000E-08	1.000E+00
3	441000	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.260E+01	1.000E+00	1.000E+00
3	371010	1	3.200E-02	0.0	0.0	0.0	0.0	0.0

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3			0.0	3.100E-01	7.161E+00	0.0	3.000E-08	1.000E+00
3	381010	1	1.180E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.370E-02	6.462E+00	0.0	3.000E-08	1.000E+00
3	391010	1	4.500E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.940E-02	4.214E+00	0.0	3.000E-08	1.000E+00
3	401010	1	2.300E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.291E+00	0.0	3.000E-08	1.000E+00
3	411010	1	7.100E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.406E+00	0.0	3.000E-08	1.000E+00
3	421010	1	8.766E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.034E+00	0.0	3.000E-08	1.000E+00
3	431010	1	8.520E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.160E-01	0.0	3.000E-08	1.000E+00
3	441010	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.700E+01	1.000E+00	1.000E+00
3	381020	1	6.900E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	4.800E-02	4.595E+00	0.0	3.000E-08	1.000E+00
3	391020	1	9.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	6.000E-02	6.919E+00	0.0	3.000E-08	1.000E+00
3	401020	1	2.900E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.987E+00	0.0	3.000E-08	1.000E+00
3	411020	1	1.300E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.293E+00	0.0	3.000E-08	1.000E+00
3	421020	1	6.780E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.963E-01	0.0	3.000E-08	1.000E+00
3	431020	1	5.280E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.613E+00	0.0	3.000E-08	1.000E+00
3	431021	1	2.610E+02	0.0	0.0	0.0	0.0	2.000E-02
3			0.0	0.0	3.300E+00	0.0	3.000E-08	1.000E+00
3	441020	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.160E+01	1.000E+00	1.000E+00
3	381030	1	6.909E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.643E+00	0.0	3.000E-08	1.000E+00
3	391030	1	1.005E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.900E-01	5.015E+00	0.0	3.000E-08	1.000E+00
3	401030	1	1.300E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.924E+00	0.0	3.000E-08	1.000E+00
3	411030	1	1.500E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.000E-04	3.093E+00	0.0	3.000E-08	1.000E+00
3	421030	1	6.750E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.250E+00	0.0	3.000E-08	1.000E+00
3	431030	1	5.420E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.257E+00	0.0	3.000E-08	1.000E+00
3	441030	1	3.392E+06	9.975E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.626E-01	0.0	3.000E-09	8.000E-05
3	451030	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	451031	1	3.367E+03	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	3.672E-02	0.0	2.000E-06	1.000E-02
3	381040	1	3.961E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.282E+00	0.0	3.000E-08	1.000E+00
3	391040	1	1.567E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.244E+00	0.0	3.000E-08	1.000E+00
3	401040	1	1.200E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.000E-04	2.636E+00	0.0	3.000E-08	1.000E+00
3	411040	1	4.800E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	4.600E-03	5.886E+00	0.0	3.000E-08	1.000E+00
3	421040	1	6.000E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.208E+00	0.0	3.000E-08	1.000E+00

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3	431040	1	1.104E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.643E+00	0.0	3.000E-08	1.000E+00
3	441040	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.870E+01	1.000E+00	1.000E+00
3	451040	1	4.230E+01	0.0	4.500E-03	0.0	0.0	0.0
3			0.0	0.0	9.971E-01	0.0	3.000E-08	1.000E+00
3	451041	1	2.600E+02	0.0	0.0	0.0	0.0	9.987E-01
3			0.0	0.0	1.271E-01	0.0	3.000E-08	1.000E+00
3	461040	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.100E+01	1.000E+00	1.000E+00
3	391050	1	6.786E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.697E+00	0.0	3.000E-08	1.000E+00
3	401050	1	1.931E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.300E-03	4.426E+00	0.0	3.000E-08	1.000E+00
3	411050	1	2.800E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	4.500E-02	3.903E+00	0.0	3.000E-08	1.000E+00
3	421050	1	3.560E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.356E+00	0.0	3.000E-08	1.000E+00
3	431050	1	4.580E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.100E+00	0.0	3.000E-08	1.000E+00
3	441050	1	1.598E+04	2.850E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.151E+00	0.0	2.000E-08	1.000E-04
3	451050	1	1.273E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.308E-01	0.0	2.000E-08	1.000E-04
3	451051	1	4.000E+01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.286E-01	0.0	3.000E-08	1.000E+00
3	461050	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.220E+01	1.000E+00	1.000E+00
3	391060	1	6.177E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.000E+00	0.0	3.000E-08	1.000E+00
3	401060	1	2.297E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.229E+00	0.0	3.000E-08	1.000E+00
3	411060	1	1.000E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.700E-02	5.862E+00	0.0	3.000E-08	1.000E+00
3	421060	1	8.400E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.978E+00	0.0	3.000E-08	1.000E+00
3	431060	1	3.600E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.625E+00	0.0	3.000E-08	1.000E+00
3	441060	1	3.228E+07	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.003E-02	0.0	2.000E-10	1.000E-05
3	451060	1	2.980E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.617E+00	0.0	3.000E-08	1.000E+00
3	451061	1	7.860E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.210E+00	0.0	1.000E-10	3.000E-06
3	461060	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.730E+01	1.000E+00	1.000E+00
3	391070	1	3.426E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.468E+00	0.0	3.000E-08	1.000E+00
3	401070	1	1.493E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.183E+00	0.0	3.000E-08	1.000E+00
3	411070	1	1.454E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	9.100E-02	4.631E+00	0.0	3.000E-08	1.000E+00
3	421070	1	3.500E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.710E+00	0.0	3.000E-08	1.000E+00
3	431070	1	2.120E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.583E+00	0.0	3.000E-08	1.000E+00
3	441070	1	2.250E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.676E+00	0.0	3.000E-08	1.000E+00
3	451070	1	1.302E+03	0.0	0.0	0.0	0.0	0.0

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3		0.0	0.0	7.430E-01	0.0	3.000E-08	1.000E+00
3	461070	1	2.050E+14	0.0	0.0	0.0	0.0
3			0.0	0.0	9.300E-03	0.0	1.000E-10
3	461071	1	2.130E+01	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.145E-01	0.0	3.000E-08
3	471070	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.183E+01	1.000E+00
3	401080	1	8.685E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	3.906E+00	0.0	3.000E-08
3	411080	1	6.405E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	6.695E+00	0.0	3.000E-08
3	421080	1	1.090E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.746E+00	0.0	3.000E-08
3	431080	1	5.170E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	5.253E+00	0.0	3.000E-08
3	441080	1	2.730E+02	0.0	0.0	0.0	0.0
3			0.0	0.0	4.210E-01	0.0	3.000E-08
3	451080	1	1.680E+01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.640E+00	0.0	3.000E-08
3	451081	1	3.600E+02	0.0	0.0	0.0	0.0
3			0.0	0.0	3.354E+00	0.0	3.000E-08
3	461080	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.670E+01	1.000E+00
3	471080	1	1.422E+02	0.0	2.850E-02	0.0	0.0
3			0.0	0.0	6.247E-01	0.0	3.000E-08
3	471081	1	1.320E+10	0.0	9.130E-01	0.0	8.700E-02
3			0.0	0.0	2.148E+00	0.0	1.000E-10
3	481080	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	8.900E-01	1.000E+00
3	401090	1	5.784E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	6.090E+00	0.0	3.000E-08
3	411090	1	7.014E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.421E+00	0.0	3.000E-08
3	421090	1	1.722E+00	0.0	0.0	0.0	0.0
3			0.0	7.000E-04	4.551E+00	0.0	3.000E-08
3	431090	1	1.400E+00	0.0	0.0	0.0	0.0
3			0.0	1.600E-03	3.243E+00	0.0	3.000E-08
3	441090	1	3.450E+01	5.000E-01	0.0	0.0	0.0
3			0.0	0.0	2.700E+00	0.0	3.000E-08
3	451090	1	8.000E+01	5.000E-01	0.0	0.0	0.0
3			0.0	0.0	1.226E+00	0.0	3.000E-08
3	451091	1	5.000E+01	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.500E-01	0.0	3.000E-08
3	461090	1	4.932E+04	9.995E-01	0.0	0.0	0.0
3			0.0	0.0	3.614E-01	0.0	1.000E-08
3	461091	1	2.814E+02	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.883E-01	0.0	3.000E-08
3	471090	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.817E+01	1.000E+00
3	471091	1	3.960E+01	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	6.062E-02	0.0	3.000E-08
3	481090	1	3.999E+07	0.0	1.000E+00	1.000E+00	0.0
3			0.0	0.0	2.024E-02	0.0	2.000E-09
3	411100	1	3.233E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	7.672E+00	0.0	3.000E-08
3	421100	1	2.018E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	3.351E+00	0.0	3.000E-08
3	431100	1	9.200E-01	0.0	0.0	0.0	0.0
3			0.0	3.700E-03	5.202E+00	0.0	3.000E-08

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3	441100	1	1.460E+01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.255E+00	0.0	3.000E-08 1.000E+00
3	451100	1	3.200E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	3.181E+00	0.0	3.000E-08 1.000E+00
3	451101	1	2.850E+01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.520E+00	0.0	3.000E-08 1.000E+00
3	461100	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.180E+01	1.000E+00 1.000E+00
3	471100	1	2.460E+01	0.0	3.000E-03	0.0	0.0 0.0
3			0.0	0.0	1.209E+00	0.0	3.000E-08 1.000E+00
3	471101	1	2.158E+07	0.0	0.0	0.0	1.360E-02
3			0.0	0.0	2.788E+00	0.0	3.000E-10 3.000E-05
3	481100	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.250E+01	1.000E+00 1.000E+00
3	411110	1	1.033E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.967E+00	0.0	3.000E-08 1.000E+00
3	421110	1	2.860E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.511E+00	0.0	3.000E-08 1.000E+00
3	431110	1	2.841E+00	0.0	0.0	0.0	0.0
3			0.0	3.400E-02	3.987E+00	0.0	3.000E-08 1.000E+00
3	441110	1	2.120E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.829E+00	0.0	3.000E-08 1.000E+00
3	451110	1	1.100E+01	4.000E-03	0.0	0.0	0.0
3			0.0	0.0	1.976E+00	0.0	3.000E-08 1.000E+00
3	461110	1	1.404E+03	9.930E-01	0.0	0.0	0.0
3			0.0	0.0	8.788E-01	0.0	3.000E-08 1.000E+00
3	461111	1	1.980E+04	2.244E-01	0.0	0.0	7.300E-01
3			0.0	0.0	5.497E-01	0.0	1.000E-10 3.000E-06
3	471110	1	6.437E+05	0.0	0.0	0.0	0.0
3			0.0	0.0	3.774E-01	0.0	8.000E-09 4.000E-05
3	471111	1	6.480E+01	0.0	0.0	0.0	9.930E-01
3			0.0	0.0	2.072E-01	0.0	3.000E-08 1.000E+00
3	481110	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.280E+01	1.000E+00 1.000E+00
3	481111	1	2.916E+03	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	3.890E-01	0.0	3.000E-08 1.000E+00
3	411120	1	6.306E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	8.364E+00	0.0	3.000E-08 1.000E+00
3	421120	1	2.297E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.906E+00	0.0	3.000E-08 1.000E+00
3	431120	1	9.852E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	6.130E+00	0.0	3.000E-08 1.000E+00
3	441120	1	3.600E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	1.839E+00	0.0	3.000E-08 1.000E+00
3	451120	1	3.800E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	3.633E+00	0.0	3.000E-08 1.000E+00
3	461120	1	7.571E+04	0.0	0.0	0.0	0.0
3			0.0	0.0	9.513E-02	0.0	1.000E-10 3.000E-06
3	471120	1	1.127E+04	0.0	0.0	0.0	0.0
3			0.0	0.0	2.110E+00	0.0	1.000E-10 3.000E-06
3	481120	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.411E+01	1.000E+00 1.000E+00
3	421130	1	1.249E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	6.232E+00	0.0	3.000E-08 1.000E+00
3	431130	1	1.562E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	4.554E+00	0.0	3.000E-08 1.000E+00
3	441130	1	8.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.665E+00	0.0	3.000E-08 1.000E+00
3	451130	1	2.720E+00	0.0	0.0	0.0	0.0

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3			0.0	0.0	2.549E+00	0.0	3.000E-08	1.000E+00
3	461130	1	9.300E+01	1.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.700E+00	0.0	3.000E-08	1.000E+00
3	471130	1	1.933E+04	1.600E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	8.329E-01	0.0	1.000E-10	3.000E-06
3	471131	1	6.900E+01	4.500E-02	0.0	0.0	0.0	6.400E-01
3			0.0	0.0	4.332E-01	0.0	3.000E-08	1.000E+00
3	481130	6	2.900E+23	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.330E-02	1.220E+01	1.000E+00	1.000E+00
3	481131	1	4.450E+08	0.0	0.0	0.0	0.0	1.400E-03
3			0.0	0.0	1.855E-01	0.0	1.000E-10	3.000E-06
3	491130	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.300E+00	1.000E+00	1.000E+00
3	491131	1	5.970E+03	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	3.907E-01	0.0	2.000E-07	1.000E-03
3	421140	1	1.062E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.503E+00	0.0	3.000E-08	1.000E+00
3	431140	1	2.150E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.835E+00	0.0	3.000E-08	1.000E+00
3	441140	1	5.300E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.317E+00	0.0	3.000E-08	1.000E+00
3	451140	1	1.850E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.495E+00	0.0	3.000E-08	1.000E+00
3	461140	1	1.450E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.179E-01	0.0	3.000E-08	1.000E+00
3	471140	1	4.600E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.409E+00	0.0	3.000E-08	1.000E+00
3	481140	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.870E+01	1.000E+00	1.000E+00
3	491140	1	7.190E+01	0.0	5.000E-03	0.0	0.0	0.0
3			0.0	0.0	7.763E-01	0.0	3.000E-08	1.000E+00
3	491141	1	4.278E+06	0.0	3.250E-02	0.0	0.0	9.675E-01
3			0.0	0.0	2.235E-01	0.0	7.000E-10	2.000E-05
3	501140	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	6.700E-01	1.000E+00	1.000E+00
3	421150	1	6.478E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.596E+00	0.0	3.000E-08	1.000E+00
3	431150	1	1.943E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.157E+00	0.0	3.000E-08	1.000E+00
3	441150	1	2.120E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.344E+00	0.0	3.000E-08	1.000E+00
3	451150	1	9.900E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.500E-03	3.075E+00	0.0	3.000E-08	1.000E+00
3	461150	1	3.740E+01	2.700E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.596E+00	0.0	3.000E-08	1.000E+00
3	471150	1	1.200E+03	5.300E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.560E+00	0.0	3.000E-08	1.000E+00
3	471151	1	1.800E+01	3.500E-02	0.0	0.0	0.0	2.100E-01
3			0.0	0.0	1.498E+00	0.0	3.000E-08	1.000E+00
3	481150	1	1.925E+05	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	5.120E-01	0.0	6.000E-09	3.000E-05
3	481151	1	3.850E+06	7.000E-05	0.0	0.0	0.0	0.0
3			0.0	0.0	6.381E-01	0.0	1.000E-09	3.000E-05
3	491150	1	1.390E+22	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.520E-01	9.570E+01	1.000E-09	9.000E-05
3	491151	1	1.615E+04	0.0	0.0	0.0	0.0	9.500E-01
3			0.0	0.0	3.370E-01	0.0	6.000E-08	4.000E-04
3	501150	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.800E-01	1.000E+00	1.000E+00

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3	431160	1	1.138E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.188E+00	0.0	3.000E-08	1.000E+00
3	441160	1	5.065E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.829E+00	0.0	3.000E-08	1.000E+00
3	451160	1	6.800E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.400E-03	5.187E+00	0.0	3.000E-08	1.000E+00
3	461160	1	1.180E+01	5.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.266E+00	0.0	3.000E-08	1.000E+00
3	471160	1	1.608E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.068E+00	0.0	3.000E-08	1.000E+00
3	471161	1	8.600E+00	0.0	0.0	0.0	0.0	6.000E-02
3			0.0	0.0	4.061E+00	0.0	3.000E-08	1.000E+00
3	481160	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.500E+00	1.000E+00	1.000E+00
3	491160	1	1.410E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.383E+00	0.0	3.000E-08	1.000E+00
3	491161	1	3.265E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.780E+00	0.0	3.000E-08	1.000E+00
3	501160	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.470E+01	1.000E+00	1.000E+00
3	431170	1	8.680E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.563E+00	0.0	3.000E-08	1.000E+00
3	441170	1	2.645E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.723E+00	0.0	3.000E-08	1.000E+00
3	451170	1	1.700E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.500E-02	3.648E+00	0.0	3.000E-08	1.000E+00
3	461170	1	5.000E+00	5.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.002E+00	0.0	3.000E-08	1.000E+00
3	471170	1	7.280E+01	1.720E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.400E+00	0.0	3.000E-08	1.000E+00
3	471171	1	5.340E+00	1.372E-01	0.0	0.0	0.0	6.000E-02
3			0.0	0.0	2.305E+00	0.0	3.000E-08	1.000E+00
3	481170	1	8.960E+03	9.150E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.510E+00	0.0	1.000E-10	3.000E-06
3	481171	1	1.210E+04	1.500E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	2.246E+00	0.0	1.000E-10	3.000E-06
3	491170	1	2.590E+03	1.500E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	9.540E-01	0.0	3.000E-08	1.000E+00
3	491171	1	6.970E+03	0.0	0.0	0.0	0.0	4.710E-01
3			0.0	0.0	3.580E-01	0.0	3.000E-08	1.000E+00
3	501170	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.750E+00	1.000E+00	1.000E+00
3	501171	1	1.175E+06	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	3.135E-01	0.0	1.000E-10	3.000E-06
3	431180	1	5.685E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.712E+00	0.0	3.000E-08	1.000E+00
3	441180	1	2.126E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.212E+00	0.0	3.000E-08	1.000E+00
3	451180	1	5.326E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.588E+00	0.0	3.000E-08	1.000E+00
3	461180	1	1.900E+00	5.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.759E+00	0.0	3.000E-08	1.000E+00
3	471180	1	3.760E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.149E+00	0.0	3.000E-08	1.000E+00
3	471181	1	2.000E+00	0.0	0.0	0.0	0.0	4.100E-01
3			0.0	0.0	2.980E+00	0.0	3.000E-08	1.000E+00
3	481180	1	3.018E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.644E-01	0.0	3.000E-08	1.000E+00
3	491180	1	5.000E+00	0.0	0.0	0.0	0.0	0.0



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3			0.0	0.0	1.957E+00	0.0	3.000E-08	1.000E+00
3	491181	1	2.670E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.390E+00	0.0	3.000E-08	1.000E+00
3	501180	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.430E+01	1.000E+00	1.000E+00
3	441190	1	1.204E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.231E+00	0.0	3.000E-08	1.000E+00
3	451190	1	4.508E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.074E+00	0.0	3.000E-08	1.000E+00
3	461190	1	5.957E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.448E+00	0.0	3.000E-08	1.000E+00
3	471190	1	2.100E+00	2.520E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.181E+00	0.0	3.000E-08	1.000E+00
3	481190	1	1.614E+02	9.050E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.450E+00	0.0	3.000E-08	1.000E+00
3	481191	1	1.320E+02	2.100E-03	0.0	0.0	0.0	0.0
3			0.0	0.0	3.000E+00	0.0	3.000E-08	1.000E+00
3	491190	1	1.440E+02	1.000E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.350E+00	0.0	3.000E-08	1.000E+00
3	491191	1	1.080E+03	0.0	0.0	0.0	0.0	5.600E-02
3			0.0	0.0	1.101E+00	0.0	3.000E-08	1.000E+00
3	501190	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	8.600E+00	1.000E+00	1.000E+00
3	501191	1	2.532E+07	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	8.976E-02	0.0	1.000E-10	3.000E-06
3	441200	1	1.089E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.627E+00	0.0	3.000E-08	1.000E+00
3	451200	1	2.116E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.098E+00	0.0	3.000E-08	1.000E+00
3	461200	1	1.524E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.157E+00	0.0	3.000E-08	1.000E+00
3	471200	1	1.230E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.168E+00	0.0	3.000E-08	1.000E+00
3	481200	1	5.080E+01	5.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	7.347E-01	0.0	3.000E-08	1.000E+00
3	491200	1	3.080E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.855E+00	0.0	3.000E-08	1.000E+00
3	491201	1	4.730E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.040E+00	0.0	3.000E-08	1.000E+00
3	501200	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.240E+01	1.000E+00	1.000E+00
3	451210	1	1.857E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.523E+00	0.0	3.000E-08	1.000E+00
3	461210	1	5.661E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.973E+00	0.0	3.000E-08	1.000E+00
3	471210	1	7.800E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	7.600E-04	3.739E+00	0.0	3.000E-08	1.000E+00
3	481210	1	1.350E+01	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.970E+00	0.0	3.000E-08	1.000E+00
3	491210	1	2.310E+01	1.100E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.054E+00	0.0	3.000E-08	1.000E+00
3	491211	1	2.328E+02	0.0	0.0	0.0	0.0	1.200E-02
3			0.0	0.0	1.566E+00	0.0	3.000E-08	1.000E+00
3	501210	1	9.742E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.152E-01	0.0	1.000E-10	3.000E-06
3	501211	1	1.740E+09	0.0	0.0	0.0	0.0	7.760E-01
3			0.0	0.0	3.873E-02	0.0	1.000E-10	3.000E-06
3	511210	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.730E+01	1.000E+00	1.000E+00

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3	451220	1	1.052E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.440E+00	0.0	3.000E-08	1.000E+00
3	461220	1	4.555E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.571E+00	0.0	3.000E-08	1.000E+00
3	471220	1	4.800E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.860E-03	5.559E+00	0.0	3.000E-08	1.000E+00
3	481220	1	5.240E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.252E+00	0.0	3.000E-08	1.000E+00
3	491220	1	1.500E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.772E+00	0.0	3.000E-08	1.000E+00
3	491221	1	1.030E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.380E+00	0.0	3.000E-08	1.000E+00
3	501220	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.600E+00	1.000E+00	1.000E+00
3	511220	1	2.353E+05	0.0	2.410E-02	0.0	0.0	0.0
3			0.0	0.0	1.005E+00	0.0	5.000E-09	3.000E-05
3	511221	1	2.515E+02	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	8.319E-02	0.0	3.000E-08	1.000E+00
3	521220	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.500E+00	1.000E+00	1.000E+00
3	451230	1	9.304E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.050E+00	0.0	3.000E-08	1.000E+00
3	461230	1	2.556E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.354E+00	0.0	3.000E-08	1.000E+00
3	471230	1	3.100E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	5.500E-03	4.499E+00	0.0	3.000E-08	1.000E+00
3	481230	1	2.100E+00	6.900E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.790E+00	0.0	3.000E-08	1.000E+00
3	491230	1	5.980E+00	9.680E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.460E+00	0.0	3.000E-08	1.000E+00
3	491231	1	4.780E+01	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.098E+00	0.0	3.000E-08	1.000E+00
3	501230	1	1.116E+07	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.297E-01	0.0	1.000E-10	3.000E-06
3	501231	1	2.404E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.192E-01	0.0	3.000E-08	1.000E+00
3	511230	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.270E+01	1.000E+00	1.000E+00
3	521230	1	3.156E+20	0.0	1.000E+00	0.0	0.0	0.0
3			0.0	0.0	2.261E-03	8.890E-01	1.000E-10	3.000E-06
3	521231	1	1.034E+07	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.514E-01	0.0	1.000E-10	3.000E-06
3	461240	1	1.912E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.053E+00	0.0	3.000E-08	1.000E+00
3	471240	1	1.700E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	9.800E-03	5.712E+00	0.0	3.000E-08	1.000E+00
3	481240	1	1.240E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.709E+00	0.0	3.000E-08	1.000E+00
3	491240	1	3.170E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.412E+00	0.0	3.000E-08	1.000E+00
3	501240	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.600E+00	1.000E+00	1.000E+00
3	511240	1	5.201E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.236E+00	0.0	7.000E-10	2.000E-05
3	511241	1	9.300E+01	0.0	0.0	0.0	0.0	7.500E-01
3			0.0	0.0	5.540E-01	0.0	3.000E-08	1.000E+00
3	521240	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.620E+00	1.000E+00	1.000E+00
3	461250	1	1.131E-01	0.0	0.0	0.0	0.0	0.0

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3			0.0	0.0	4.763E+00	0.0	3.000E-08	1.000E+00
3	471250	1	1.767E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	4.200E-02	4.406E+00	0.0	3.000E-08	1.000E+00
3	481250	1	6.500E-01	5.100E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	4.400E+00	0.0	3.000E-08	1.000E+00
3	491250	1	2.360E+00	8.900E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.010E+00	0.0	3.000E-08	1.000E+00
3	491251	1	1.220E+01	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.769E+00	0.0	3.000E-08	1.000E+00
3	501250	1	8.330E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.130E+00	0.0	3.000E-09	2.000E-05
3	501251	1	5.710E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.152E+00	0.0	3.000E-08	1.000E+00
3	511250	1	8.704E+07	3.500E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.355E-01	0.0	9.000E-10	1.000E-04
3	521250	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.000E+00	1.000E+00	1.000E+00
3	521251	1	4.959E+06	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.416E-01	0.0	4.000E-09	1.000E-04
3	461260	1	7.873E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.635E+00	0.0	3.000E-08	1.000E+00
3	471260	1	1.031E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.434E+00	0.0	3.000E-08	1.000E+00
3	481260	1	5.060E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.211E+00	0.0	3.000E-08	1.000E+00
3	491260	1	1.600E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.210E+00	0.0	3.000E-08	1.000E+00
3	501260	1	3.156E+12	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.620E-01	0.0	1.000E-10	3.000E-06
3	511260	1	1.077E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.130E+00	0.0	1.000E-10	3.000E-06
3	511261	1	1.149E+03	0.0	0.0	0.0	0.0	1.400E-01
3			0.0	0.0	2.202E+00	0.0	3.000E-08	1.000E+00
3	521260	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.870E+01	1.000E+00	1.000E+00
3	471270	1	9.026E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.068E+00	0.0	3.000E-08	1.000E+00
3	481270	1	4.101E+00	5.000E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	4.074E+00	0.0	3.000E-08	1.000E+00
3	491270	1	1.090E+00	8.400E-01	0.0	0.0	0.0	0.0
3			0.0	6.700E-03	3.843E+00	0.0	3.000E-08	1.000E+00
3	491271	1	3.670E+00	9.930E-01	0.0	0.0	0.0	0.0
3			0.0	7.000E-03	3.918E+00	0.0	3.000E-08	1.000E+00
3	501270	1	7.560E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.480E+00	0.0	1.000E-10	3.000E-06
3	501271	1	2.478E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.777E+00	0.0	3.000E-08	1.000E+00
3	511270	1	3.330E+05	1.390E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.006E+00	0.0	1.000E-10	3.000E-06
3	521270	1	3.370E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.290E-01	0.0	3.000E-08	2.000E-04
3	521271	1	9.420E+06	0.0	0.0	0.0	0.0	9.760E-01
3			0.0	0.0	8.681E-02	0.0	1.000E-09	5.000E-05
3	531270	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	471280	1	5.358E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.898E+00	0.0	3.000E-08	1.000E+00
3	481280	1	9.400E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.834E+00	0.0	3.000E-08	1.000E+00

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3	491280	1	8.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	6.000E-04	5.880E+00	0.0	3.000E-08	1.000E+00
3	501280	1	3.550E+03	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	8.500E-01	0.0	3.000E-08	1.000E+00
3	511280	1	3.244E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.520E+00	0.0	1.000E-10	3.000E-06
3	511281	1	6.240E+02	0.0	0.0	0.0	0.0	3.600E-02
3			0.0	0.0	2.811E+00	0.0	3.000E-08	1.000E+00
3	521280	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.170E+01	1.000E+00	1.000E+00
3	531280	1	1.499E+03	0.0	6.900E-02	0.0	0.0	0.0
3			0.0	0.0	8.280E-01	0.0	3.000E-08	1.000E+00
3	541280	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.910E+00	1.000E+00	1.000E+00
3	481290	1	2.258E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.000E-04	4.532E+00	0.0	3.000E-08	1.000E+00
3	491290	1	6.300E-01	1.200E-01	0.0	0.0	0.0	0.0
3			0.0	2.600E-03	4.630E+00	0.0	3.000E-08	1.000E+00
3	501290	1	1.338E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.298E+00	0.0	3.000E-08	1.000E+00
3	501291	1	4.140E+02	0.0	0.0	0.0	0.0	2.000E-06
3			0.0	0.0	2.899E+00	0.0	3.000E-08	1.000E+00
3	511290	1	1.584E+04	9.600E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.857E+00	0.0	1.000E-10	3.000E-06
3	521290	1	4.176E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.951E-01	0.0	1.000E-07	8.000E-04
3	521291	1	2.903E+06	0.0	0.0	0.0	0.0	6.400E-01
3			0.0	0.0	3.064E-01	0.0	1.000E-09	2.000E-05
3	531290	1	4.950E+14	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.372E-02	0.0	2.000E-11	6.000E-08
3	541290	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.640E+01	1.000E+00	1.000E+00
3	541291	1	7.681E+05	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.331E-01	0.0	1.000E-10	3.000E-06
3	481300	1	1.447E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.483E+00	0.0	3.000E-08	1.000E+00
3	491300	1	3.200E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.430E-02	5.793E+00	0.0	3.000E-08	1.000E+00
3	501300	1	2.232E+02	1.000E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	1.330E+00	0.0	3.000E-08	1.000E+00
3	511300	1	2.370E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.970E+00	0.0	3.000E-08	1.000E+00
3	511301	1	3.780E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.700E+00	0.0	3.000E-08	1.000E+00
3	521300	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.450E+01	1.000E+00	1.000E+00
3	531300	1	4.450E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.432E+00	0.0	1.000E-10	3.000E-06
3	531301	1	5.400E+02	0.0	0.0	0.0	0.0	8.400E-01
3			0.0	0.0	2.848E-01	0.0	3.000E-08	1.000E+00
3	541300	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.100E+00	1.000E+00	1.000E+00
3	481310	1	2.720E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.785E+00	0.0	3.000E-08	1.000E+00
3	491310	1	2.800E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.760E-02	5.017E+00	0.0	3.000E-08	1.000E+00
3	501310	1	3.900E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.658E+00	0.0	3.000E-08	1.000E+00
3	511310	1	1.382E+03	1.160E-01	0.0	0.0	0.0	0.0

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3			0.0	0.0	2.520E+00	0.0	3.000E-08	1.000E+00
3	521310	1	1.500E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.132E+00	0.0	3.000E-08	1.000E+00
3	521311	1	1.080E+05	0.0	0.0	0.0	0.0	2.220E-01
3			0.0	0.0	1.633E+00	0.0	6.000E-09	4.000E-05
3	531310	1	6.930E+05	1.100E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	5.756E-01	0.0	1.000E-10	3.000E-07
3	541310	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.120E+01	1.000E+00	1.000E+00
3	541311	1	1.023E+06	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.620E-01	0.0	4.000E-07	1.000E+00
3	481320	1	1.866E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.302E+00	0.0	3.000E-08	1.000E+00
3	491320	1	2.010E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	4.300E-02	8.344E+00	0.0	3.000E-08	1.000E+00
3	501320	1	3.970E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.000E+00	0.0	3.000E-08	1.000E+00
3	511320	1	1.670E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.850E+00	0.0	3.000E-08	1.000E+00
3	511321	1	2.460E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.910E+00	0.0	3.000E-08	1.000E+00
3	521320	1	2.768E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.350E-01	0.0	4.000E-09	2.000E-05
3	531320	1	8.260E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.755E+00	0.0	3.000E-09	8.000E-06
3	541320	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.690E+01	1.000E+00	1.000E+00
3	551320	1	5.598E+05	0.0	9.813E-01	0.0	0.0	0.0
3			0.0	0.0	7.277E-01	0.0	1.000E-10	3.000E-06
3	491330	1	2.240E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	4.600E-01	7.180E+00	0.0	3.000E-08	1.000E+00
3	501330	1	1.440E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.300E-03	4.271E+00	0.0	3.000E-08	1.000E+00
3	511330	1	1.500E+02	1.730E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.400E+00	0.0	3.000E-08	1.000E+00
3	521330	1	7.500E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.905E+00	0.0	3.000E-08	1.000E+00
3	521331	1	3.324E+03	9.068E-02	0.0	0.0	0.0	1.800E-01
3			0.0	0.0	2.228E+00	0.0	3.000E-08	1.000E+00
3	531330	1	7.490E+04	2.880E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.021E+00	0.0	4.000E-10	1.000E-06
3	531331	1	9.000E+00	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.630E+00	0.0	3.000E-08	1.000E+00
3	541330	1	4.530E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.831E-01	0.0	3.000E-07	1.000E+00
3	541331	1	1.892E+05	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.318E-01	0.0	3.000E-07	1.000E+00
3	551330	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	491340	1	2.137E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.691E+00	0.0	3.000E-08	1.000E+00
3	501340	1	1.120E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.700E-01	3.778E+00	0.0	3.000E-08	1.000E+00
3	511340	1	7.800E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.037E+00	0.0	3.000E-08	1.000E+00
3	511341	1	1.023E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.170E-03	5.010E+00	0.0	3.000E-08	1.000E+00
3	521340	1	2.510E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.108E+00	0.0	3.000E-08	1.000E+00

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3	531340	1	3.150E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.223E+00	0.0	6.000E-09	2.000E-05
3	531341	1	2.160E+02	2.300E-02	0.0	0.0	0.0	9.770E-01
3			0.0	0.0	3.746E-01	0.0	3.000E-08	1.000E+00
3	541340	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.040E+01	1.000E+00	1.000E+00
3	541341	1	2.900E-01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.909E+00	0.0	3.000E-08	1.000E+00
3	551340	1	6.516E+07	0.0	3.000E-06	0.0	0.0	0.0
3			0.0	0.0	1.719E+00	0.0	4.000E-10	9.000E-06
3	551341	1	1.045E+04	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.349E-01	0.0	2.000E-07	1.000E-03
3	561340	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.400E+00	1.000E+00	1.000E+00
3	501350	1	1.878E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	7.900E-02	5.037E+00	0.0	3.000E-08	1.000E+00
3	511350	1	1.710E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.080E-01	4.270E+00	0.0	3.000E-08	1.000E+00
3	521350	1	1.900E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.562E+00	0.0	3.000E-08	1.000E+00
3	531350	1	2.365E+04	1.657E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.950E+00	0.0	1.000E-09	4.000E-06
3	541350	1	3.290E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.630E-01	0.0	1.000E-07	1.000E+00
3	541351	1	9.170E+02	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	5.070E-01	0.0	3.000E-08	1.000E+00
3	551350	1	7.300E+13	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.630E-02	0.0	3.000E-09	1.000E-04
3	551351	1	3.180E+03	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.630E+00	0.0	3.000E-08	1.000E+00
3	561350	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	6.590E+00	1.000E+00	1.000E+00
3	561351	1	1.033E+05	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.798E-01	0.0	1.000E-10	3.000E-06
3	501360	1	8.621E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.041E+00	0.0	3.000E-08	1.000E+00
3	511360	1	8.200E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.300E-01	5.558E+00	0.0	3.000E-08	1.000E+00
3	521360	1	1.750E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.100E-02	3.350E+00	0.0	3.000E-08	1.000E+00
3	531360	1	8.340E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.340E+00	0.0	3.000E-08	1.000E+00
3	531361	1	4.690E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.816E+00	0.0	3.000E-08	1.000E+00
3	541360	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	8.900E+00	1.000E+00	1.000E+00
3	551360	1	1.137E+06	1.600E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.275E+00	0.0	6.000E-09	6.000E-05
3	561360	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.900E+00	1.000E+00	1.000E+00
3	561361	1	3.084E-01	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.032E+00	0.0	3.000E-08	1.000E+00
3	511370	1	1.399E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.000E-01	4.962E+00	0.0	3.000E-08	1.000E+00
3	521370	1	2.490E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	2.700E-02	3.782E+00	0.0	3.000E-08	1.000E+00
3	531370	1	2.450E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	7.100E-02	3.025E+00	0.0	3.000E-08	1.000E+00
3	541370	1	2.291E+02	0.0	0.0	0.0	0.0	0.0

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3			0.0	0.0	1.891E+00	0.0	3.000E-08	1.000E+00
3	551370	1	9.489E+08	9.470E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.879E-01	0.0	5.000E-10	2.000E-05
3	561370	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.120E+01	1.000E+00	1.000E+00
3	561371	1	1.531E+02	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	5.992E-01	0.0	3.000E-08	1.000E+00
3	511380	1	1.606E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.608E+00	0.0	3.000E-08	1.000E+00
3	521380	1	1.400E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	6.700E-02	3.014E+00	0.0	3.000E-08	1.000E+00
3	531380	1	6.490E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	5.500E-02	4.150E+00	0.0	3.000E-08	1.000E+00
3	541380	1	8.450E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.766E+00	0.0	3.000E-08	1.000E+00
3	551380	1	2.005E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.610E+00	0.0	3.000E-08	1.000E+00
3	551381	1	1.740E+02	0.0	0.0	0.0	0.0	8.100E-01
3			0.0	0.0	1.037E+00	0.0	3.000E-08	1.000E+00
3	561380	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.170E+01	1.000E+00	1.000E+00
3	571380	1	3.310E+18	0.0	6.640E-01	0.0	0.0	0.0
3			0.0	0.0	1.267E+00	8.900E-02	1.000E-10	3.000E-06
3	511390	1	7.419E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.592E+00	0.0	3.000E-08	1.000E+00
3	521390	1	3.428E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.900E-02	4.727E+00	0.0	3.000E-08	1.000E+00
3	531390	1	2.290E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	9.900E-02	3.383E+00	0.0	3.000E-08	1.000E+00
3	541390	1	3.968E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.806E+00	0.0	3.000E-08	1.000E+00
3	551390	1	5.560E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.990E+00	0.0	3.000E-08	1.000E+00
3	561390	1	4.984E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.440E-01	0.0	3.000E-08	1.000E+00
3	571390	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	9.991E+01	1.000E+00	1.000E+00
3	521400	1	1.741E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	6.700E-02	3.611E+00	0.0	3.000E-08	1.000E+00
3	531400	1	8.600E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	9.400E-02	5.090E+00	0.0	3.000E-08	1.000E+00
3	541400	1	1.360E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.507E+00	0.0	3.000E-08	1.000E+00
3	551400	1	6.370E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.968E+00	0.0	3.000E-08	1.000E+00
3	561400	1	1.102E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.921E-01	0.0	1.000E-09	2.000E-05
3	571400	1	1.450E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.826E+00	0.0	4.000E-09	2.000E-05
3	581400	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	8.848E+01	1.000E+00	1.000E+00
3	521410	1	1.725E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.256E+00	0.0	3.000E-08	1.000E+00
3	531410	1	4.300E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.170E-01	4.204E+00	0.0	3.000E-08	1.000E+00
3	541410	1	1.730E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	4.100E-04	3.074E+00	0.0	3.000E-08	1.000E+00
3	551410	1	2.494E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	3.400E-04	2.937E+00	0.0	3.000E-08	1.000E+00

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3	561410	1	1.096E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.870E+00	0.0	3.000E-08	1.000E+00
3	571410	1	1.411E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.898E-01	0.0	1.000E-10	3.000E-06
3	581410	1	2.808E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.468E-01	0.0	5.000E-09	9.000E-05
3	591410	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	521420	1	9.909E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.888E+00	0.0	3.000E-08	1.000E+00
3	531420	1	2.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.300E-01	5.895E+00	0.0	3.000E-08	1.000E+00
3	541420	1	1.240E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	3.900E-03	2.980E+00	0.0	3.000E-08	1.000E+00
3	551420	1	1.700E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	9.600E-04	4.236E+00	0.0	3.000E-08	1.000E+00
3	561420	1	6.360E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.423E+00	0.0	3.000E-08	1.000E+00
3	571420	1	5.470E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.236E+00	0.0	3.000E-08	1.000E+00
3	581420	1	0.0	0.0	0.0	0.0	1.000E+00	0.0
3			0.0	0.0	0.0	1.108E+01	2.000E-14	3.000E-08
3	591420	1	6.883E+04	0.0	1.640E-04	0.0	0.0	0.0
3			0.0	0.0	8.670E-01	0.0	5.000E-09	3.000E-05
3	591421	1	8.760E+02	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	3.683E-03	0.0	3.000E-08	1.000E+00
3	601420	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.720E+01	1.000E+00	1.000E+00
3	531430	1	2.187E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.627E+00	0.0	3.000E-08	1.000E+00
3	541430	1	3.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	8.900E-03	4.130E+00	0.0	3.000E-08	1.000E+00
3	551430	1	1.770E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.620E-02	3.152E+00	0.0	3.000E-08	1.000E+00
3	561430	1	1.433E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.290E+00	0.0	3.000E-08	1.000E+00
3	571430	1	8.480E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.463E+00	0.0	3.000E-08	1.000E+00
3	581430	1	1.192E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.080E-01	0.0	7.000E-09	4.000E-05
3	591430	1	1.173E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.153E-01	0.0	6.000E-09	5.000E-09
3	601430	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.220E+01	1.000E+00	1.000E+00
3	531440	1	1.846E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.967E+00	0.0	3.000E-08	1.000E+00
3	541440	1	1.150E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.100E-02	2.529E+00	0.0	3.000E-08	1.000E+00
3	551440	1	1.002E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	3.170E-02	4.842E+00	0.0	3.000E-08	1.000E+00
3	561440	1	1.150E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.651E+00	0.0	3.000E-08	1.000E+00
3	571440	1	4.080E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.710E+00	0.0	3.000E-08	1.000E+00
3	581440	1	2.462E+07	1.510E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.110E-01	0.0	2.000E-10	1.000E-05
3	591440	1	1.037E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.237E+00	0.0	3.000E-08	1.000E+00
3	591441	1	4.320E+02	0.0	0.0	0.0	0.0	9.993E-01



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3			0.0	0.0	5.771E-02	0.0	3.000E-08	1.000E+00
3	601440	1	7.200E+22	0.0	0.0	0.0	1.000E+00	0.0
3			0.0	0.0	1.900E+00	2.380E+01	3.000E-12	7.000E-05
3	531450	1	1.112E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.810E+00	0.0	3.000E-08	1.000E+00
3	541450	1	9.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.118E+00	0.0	3.000E-08	1.000E+00
3	551450	1	5.940E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.380E-01	3.457E+00	0.0	3.000E-08	1.000E+00
3	561450	1	4.310E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.029E+00	0.0	3.000E-08	1.000E+00
3	571450	1	2.480E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.727E+00	0.0	3.000E-08	1.000E+00
3	581450	1	1.810E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.578E+00	0.0	3.000E-08	1.000E+00
3	591450	1	2.154E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.756E-01	0.0	1.000E-10	3.000E-06
3	601450	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	8.300E+00	1.000E+00	1.000E+00
3	541460	1	2.052E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.057E+00	0.0	3.000E-08	1.000E+00
3	551460	1	3.350E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.340E-01	4.822E+00	0.0	3.000E-08	1.000E+00
3	561460	1	2.220E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.008E+00	0.0	3.000E-08	1.000E+00
3	571460	1	6.270E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.842E+00	0.0	3.000E-08	1.000E+00
3	581460	1	8.110E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.360E-01	0.0	3.000E-08	1.000E+00
3	591460	1	1.449E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.330E+00	0.0	3.000E-08	1.000E+00
3	601460	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.720E+01	1.000E+00	1.000E+00
3	541470	1	2.104E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.592E+00	0.0	3.000E-08	1.000E+00
3	551470	1	2.250E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	4.300E-01	3.981E+00	0.0	3.000E-08	1.000E+00
3	561470	1	8.930E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.159E+00	0.0	3.000E-08	1.000E+00
3	571470	1	4.015E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	3.300E-04	2.568E+00	0.0	3.000E-08	1.000E+00
3	581470	1	5.640E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.940E+00	0.0	3.000E-08	1.000E+00
3	591470	1	8.040E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.300E+00	0.0	3.000E-08	1.000E+00
3	601470	1	9.487E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.090E-01	0.0	8.000E-09	6.000E-05
3	611470	1	8.279E+07	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.196E-02	0.0	2.000E-09	2.000E-04
3	621470	1	3.350E+18	0.0	0.0	0.0	1.000E+00	0.0
3			0.0	0.0	2.290E+00	1.510E+01	2.000E-12	6.000E-05
3	551480	1	1.700E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	8.000E-02	5.423E+00	0.0	3.000E-08	1.000E+00
3	561480	1	6.100E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.178E+00	0.0	3.000E-08	1.000E+00
3	571480	1	1.050E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.300E-03	3.406E+00	0.0	3.000E-08	1.000E+00
3	581480	1	5.600E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.960E-01	0.0	3.000E-08	1.000E+00

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3	591480	1	1.362E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.921E+00	0.0	3.000E-08	1.000E+00
3	601480	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.700E+00	1.000E+00	1.000E+00
3	611480	1	4.640E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.300E+00	0.0	1.000E-10	3.000E-06
3	611481	1	3.567E+06	0.0	0.0	0.0	0.0	4.600E-02
3			0.0	0.0	2.146E+00	0.0	1.000E-10	3.000E-06
3	621480	1	2.200E+23	0.0	0.0	0.0	1.000E+00	0.0
3			0.0	0.0	2.000E+00	1.130E+01	2.000E-14	3.000E-08
3	551490	1	9.869E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.911E+00	0.0	3.000E-08	1.000E+00
3	561490	1	7.000E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	4.300E-03	3.536E+00	0.0	3.000E-08	1.000E+00
3	571490	1	1.200E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	1.170E-02	2.870E+00	0.0	3.000E-08	1.000E+00
3	581490	1	5.000E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.220E+00	0.0	3.000E-08	1.000E+00
3	591490	1	1.360E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.569E+00	0.0	3.000E-08	1.000E+00
3	601490	1	6.221E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	8.730E-01	0.0	5.000E-08	3.000E-04
3	611490	1	1.911E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.619E-01	0.0	8.000E-09	4.000E-05
3	621490	1	0.0	0.0	0.0	0.0	1.000E+00	0.0
3			0.0	0.0	0.0	1.390E+01	2.000E-14	3.000E-08
3	551500	1	9.205E-02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.082E+00	0.0	3.000E-08	1.000E+00
3	561500	1	2.052E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.081E+00	0.0	3.000E-08	1.000E+00
3	571500	1	6.756E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	3.600E-04	4.584E+00	0.0	3.000E-08	1.000E+00
3	581500	1	4.800E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.129E+00	0.0	3.000E-08	1.000E+00
3	591500	1	6.190E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.976E+00	0.0	3.000E-08	1.000E+00
3	601500	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.600E+00	1.000E+00	1.000E+00
3	611500	1	9.650E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.200E+00	0.0	1.000E-10	3.000E-06
3	621500	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	7.400E+00	1.000E+00	1.000E+00
3	561510	1	1.998E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.434E+00	0.0	3.000E-08	1.000E+00
3	571510	1	7.134E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	2.100E-02	3.803E+00	0.0	3.000E-08	1.000E+00
3	581510	1	1.020E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.317E+00	0.0	3.000E-08	1.000E+00
3	591510	1	1.890E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.935E+00	0.0	3.000E-08	1.000E+00
3	601510	1	7.460E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.484E+00	0.0	3.000E-08	1.000E+00
3	611510	1	1.022E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.290E-01	0.0	1.000E-10	3.000E-06
3	621510	1	2.800E+09	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.964E-02	0.0	2.000E-09	4.000E-04
3	631510	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	4.790E+01	1.000E+00	1.000E+00
3	561520	1	1.033E-01	0.0	0.0	0.0	0.0	0.0

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3		0.0	0.0	3.914E+00	0.0	3.000E-08	1.000E+00
3	571520	1	5.346E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.240E+00	0.0	3.000E-08
3	581520	1	1.863E+01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.944E+00	0.0	3.000E-08
3	591520	1	3.240E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	3.668E+00	0.0	3.000E-08
3	601520	1	6.840E+02	0.0	0.0	0.0	0.0
3			0.0	0.0	4.500E-01	0.0	3.000E-08
3	611520	1	2.460E+02	0.0	0.0	0.0	0.0
3			0.0	0.0	1.550E+00	0.0	3.000E-08
3	611521	1	4.510E+02	0.0	0.0	0.0	0.0
3			0.0	0.0	2.320E+00	0.0	3.000E-08
3	621520	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.660E+01	1.000E+00
3	631520	1	4.274E+08	0.0	7.208E-01	0.0	0.0
3			0.0	0.0	1.286E+00	0.0	4.000E-10
3	631521	1	3.339E+04	0.0	2.800E-01	0.0	0.0
3			0.0	0.0	8.149E-01	0.0	1.000E-08
3	641520	1	3.400E+21	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.200E+00	2.000E-01	2.000E-14
3	571530	1	2.357E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	4.683E+00	0.0	3.000E-08
3	581530	1	1.185E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	2.805E+00	0.0	3.000E-08
3	591530	1	1.313E+01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.727E+00	0.0	3.000E-08
3	601530	1	3.200E+01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.783E+00	0.0	3.000E-08
3	611530	1	3.240E+02	0.0	0.0	0.0	0.0
3			0.0	0.0	7.794E-01	0.0	3.000E-08
3	621530	1	1.666E+05	0.0	0.0	0.0	0.0
3			0.0	0.0	3.090E-01	0.0	1.000E-08
3	631530	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	5.210E+01	1.000E+00
3	641530	1	2.087E+07	0.0	1.000E+00	0.0	0.0
3			0.0	0.0	9.151E-02	0.0	3.000E-09
3	571540	1	1.938E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.814E+00	0.0	3.000E-08
3	581540	1	4.671E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	2.653E+00	0.0	3.000E-08
3	591540	1	2.300E+00	0.0	0.0	0.0	0.0
3			0.0	0.0	4.287E+00	0.0	3.000E-08
3	601540	1	2.590E+01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.215E+00	0.0	1.000E-10
3	611540	1	1.040E+02	0.0	0.0	0.0	0.0
3			0.0	0.0	2.650E+00	0.0	3.000E-08
3	611541	1	1.610E+02	0.0	0.0	0.0	1.000E-01
3			0.0	0.0	2.647E+00	0.0	3.000E-08
3	621540	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.260E+01	1.000E+00
3	631540	1	2.710E+08	0.0	2.000E-04	0.0	0.0
3			0.0	0.0	1.522E+00	0.0	1.000E-10
3	641540	6	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.100E+00	1.000E+00
3	571550	1	1.005E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	5.515E+00	0.0	3.000E-08
3	581550	1	4.282E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	3.586E+00	0.0	3.000E-08

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3	591550	1	7.724E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	1.000E-02	3.551E+00	0.0	3.000E-08	1.000E+00
3	601550	1	8.900E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.200E+00	0.0	3.000E-08	1.000E+00
3	611550	1	4.800E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.653E+00	0.0	3.000E-08	1.000E+00
3	621550	1	1.338E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.709E-01	0.0	3.000E-08	1.000E+00
3	631550	1	1.502E+08	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.241E-01	0.0	3.000E-09	2.000E-04
3	641551	1	3.100E-02	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	1.215E-01	0.0	3.000E-08	1.000E+00
3	641550	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.480E+01	1.000E+00	1.000E+00
3	581560	1	1.795E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.289E+00	0.0	3.000E-08	1.000E+00
3	591560	1	9.786E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.837E+00	0.0	3.000E-08	1.000E+00
3	601560	1	2.039E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.888E+00	0.0	3.000E-08	1.000E+00
3	611560	1	6.188E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.208E+00	0.0	3.000E-08	1.000E+00
3	621560	1	3.380E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.360E-01	0.0	1.000E-10	3.000E-06
3	631560	1	1.312E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.691E+00	0.0	1.000E-10	3.000E-06
3	641560	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.060E+01	1.000E+00	1.000E+00
3	581570	1	1.793E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.520E+00	0.0	3.000E-08	1.000E+00
3	591570	1	4.702E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.268E+00	0.0	3.000E-08	1.000E+00
3	601570	1	2.722E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.808E+00	0.0	3.000E-08	1.000E+00
3	611570	1	2.769E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.292E+00	0.0	3.000E-08	1.000E+00
3	621570	1	4.820E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.309E+00	0.0	3.000E-08	1.000E+00
3	631570	1	5.465E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	6.810E-01	0.0	1.000E-10	3.000E-06
3	641570	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.570E+01	1.000E+00	1.000E+00
3	591580	1	4.237E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.707E+00	0.0	3.000E-08	1.000E+00
3	601580	1	8.623E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.513E+00	0.0	3.000E-08	1.000E+00
3	611580	1	2.327E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.733E+00	0.0	3.000E-08	1.000E+00
3	621580	1	3.306E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.633E-01	0.0	3.000E-08	1.000E+00
3	631580	1	2.754E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.044E+00	0.0	3.000E-08	1.000E+00
3	641580	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.480E+01	1.000E+00	1.000E+00
3	591590	1	2.201E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	5.111E+00	0.0	3.000E-08	1.000E+00
3	601590	1	7.945E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.729E+00	0.0	3.000E-08	1.000E+00
3	611590	1	3.081E+00	0.0	0.0	0.0	0.0	0.0

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3			0.0	0.0	2.942E+00	0.0	3.000E-08	1.000E+00
3	621590	1	8.812E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.965E+00	0.0	3.000E-08	1.000E+00
3	631590	1	1.122E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.278E+00	0.0	3.000E-08	1.000E+00
3	641590	1	6.680E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.640E-01	0.0	1.000E-08	8.000E-05
3	651590	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	601600	1	2.942E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.306E+00	0.0	3.000E-08	1.000E+00
3	611600	1	2.454E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.469E+00	0.0	3.000E-08	1.000E+00
3	621600	1	6.324E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.536E+00	0.0	3.000E-08	1.000E+00
3	631600	1	3.800E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.709E+00	0.0	3.000E-08	1.000E+00
3	641600	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.180E+01	1.000E+00	1.000E+00
3	651600	1	6.247E+06	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.385E+00	0.0	1.000E-09	4.000E-05
3	661600	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.340E+00	1.000E+00	1.000E+00
3	601610	1	2.585E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.039E+00	0.0	3.000E-08	1.000E+00
3	611610	1	8.630E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.804E+00	0.0	3.000E-08	1.000E+00
3	621610	1	6.718E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.645E+00	0.0	3.000E-08	1.000E+00
3	631610	1	2.480E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.012E+00	0.0	3.000E-08	1.000E+00
3	641610	1	2.200E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	9.732E-01	0.0	3.000E-08	1.000E+00
3	651610	1	5.940E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.326E-01	0.0	1.000E-10	3.000E-06
3	661610	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.900E+01	1.000E+00	1.000E+00
3	611620	1	5.829E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.699E+00	0.0	3.000E-08	1.000E+00
3	621620	1	2.685E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.261E+00	0.0	3.000E-08	1.000E+00
3	631620	1	3.243E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.421E+00	0.0	3.000E-08	1.000E+00
3	641620	1	5.040E+02	2.000E-02	0.0	0.0	0.0	0.0
3			0.0	0.0	8.232E-01	0.0	3.000E-08	1.000E+00
3	651620	1	4.560E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.646E+00	0.0	3.000E-08	1.000E+00
3	651621	1	8.028E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.832E+00	0.0	1.000E-10	3.000E-06
3	661620	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.550E+01	1.000E+00	1.000E+00
3	621630	1	1.977E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.003E+00	0.0	3.000E-08	1.000E+00
3	631630	1	6.018E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.613E+00	0.0	3.000E-08	1.000E+00
3	641630	1	6.800E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.820E+00	0.0	3.000E-08	1.000E+00
3	651630	1	1.170E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.124E+00	0.0	3.000E-08	1.000E+00

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3	651631	2	7.000E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.490E-01	0.0	3.000E-08	1.000E+00
3	661630	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.490E+01	1.000E+00	1.000E+00
3	621640	1	8.210E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.852E+00	0.0	3.000E-08	1.000E+00
3	631640	1	3.457E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.710E+00	0.0	3.000E-08	1.000E+00
3	641640	1	1.096E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.365E+00	0.0	3.000E-08	1.000E+00
3	651640	1	1.800E+02	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.010E+00	0.0	3.000E-08	1.000E+00
3	661640	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.810E+01	1.000E+00	1.000E+00
3	621650	1	6.500E-01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.654E+00	0.0	3.000E-08	1.000E+00
3	631650	1	1.587E+00	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.237E+00	0.0	3.000E-08	1.000E+00
3	641650	1	1.595E+01	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.111E+00	0.0	3.000E-08	1.000E+00
3	651650	1	1.270E+02	7.300E-01	0.0	0.0	0.0	0.0
3			0.0	0.0	1.748E+00	0.0	3.000E-08	1.000E+00
3	661650	1	8.402E+03	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	4.743E-01	0.0	7.000E-08	4.000E-04
3	661651	1	7.540E+01	0.0	0.0	0.0	0.0	9.776E-01
3			0.0	0.0	1.121E-01	0.0	3.000E-08	1.000E+00
3	671650	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	661660	1	2.938E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.068E-01	0.0	7.000E-09	4.000E-05
3	671660	1	9.648E+04	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	7.252E-01	0.0	6.000E-09	3.000E-05
3	671661	1	3.800E+10	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.770E+00	0.0	1.000E-10	3.000E-06
3	681660	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.340E+01	1.000E+00	1.000E+00
3	681670	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.290E+01	1.000E+00	1.000E+00
3	681671	1	2.269E+00	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	2.059E-01	0.0	3.000E-08	1.000E+00
3	681680	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.710E+01	1.000E+00	1.000E+00
3	701680	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.400E-01	1.000E+00	1.000E+00
3	681690	1	8.122E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.030E-01	0.0	1.000E-08	9.000E-05
3	691690	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.000E+02	1.000E+00	1.000E+00
3	701690	1	2.767E+06	0.0	1.000E+00	0.0	0.0	0.0
3			0.0	0.0	4.292E-01	0.0	1.000E-10	3.000E-06
3	681700	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.490E+01	1.000E+00	1.000E+00
3	691700	1	1.111E+07	0.0	1.310E-03	0.0	0.0	0.0
3			0.0	0.0	3.322E-01	0.0	1.000E-09	5.000E-05
3	691701	1	4.100E-06	0.0	0.0	0.0	0.0	1.000E+00
3			0.0	0.0	0.0	0.0	3.000E-08	1.000E+00
3	701700	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	3.140E+00	1.000E+00	1.000E+00
3	681710	1	2.706E+04	0.0	0.0	0.0	0.0	0.0

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3			0.0	0.0	7.900E-01	0.0	2.000E-08	1.000E-04
3	691710	1	6.060E+07	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	2.601E-02	0.0	4.000E-09	5.000E-04
3	701710	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	1.440E+01	1.000E+00	1.000E+00
3	681720	1	1.775E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	3.560E-01	0.0	1.000E-10	3.000E-06
3	691720	1	2.290E+05	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	1.004E+00	0.0	1.000E-10	3.000E-06
3	701720	6	0.0	0.0	0.0	0.0	0.0	0.0
3			0.0	0.0	0.0	2.190E+01	1.000E+00	1.000E+00

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# 国際単位系 (SI) と換算表

表1 SI基本単位および補助単位

量	名称	記号
長さ	メートル	m
質量	キログラム	kg
時間	秒	s
電流	アンペア	A
熱力学温度	ケルビン	K
物質	モル	mol
光度	カンデラ	cd
平面角	ラジアン	rad
立体角	ステラジアン	sr

表3 固有の名称をもつ SI 組立単位

量	名称	記号	他のSI単位 による表現
周波数	ヘルツ	Hz	s <sup>-1</sup>
力	ニュートン	N	m·kg/s <sup>2</sup>
圧力, 応力	パスカル	Pa	N/m <sup>2</sup>
エネルギー, 仕事, 熱量	ジュール	J	N·m
工率, 放射束	ワット	W	J/s
電気量, 電荷	クーロン	C	A·s
電位, 電圧, 起電力	ボルト	V	W/A
静電容量	ファラド	F	C/V
電気抵抗	オーム	Ω	V/A
コンダクタンス	ジーメンズ	S	A/V
磁束	ウェーバ	Wb	V·s
磁束密度	テスラ	T	Wb/m <sup>2</sup>
インダクタンス	ヘンリー	H	Wb/A
セルシウス温度	セルシウス度	°C	
光束	ルーメン	lm	cd·sr
照度	ルクス	lx	lm/m <sup>2</sup>
放射能	ベクレル	Bq	s <sup>-1</sup>
吸収線量	グレイ	Gy	J/kg
線量当量	シーベルト	Sv	J/kg

表2 SIと併用される単位

名称	記号
分, 時, 日	min, h, d
度, 分, 秒	°, ', "
リットル	l, L
トン	t
電子ボルト	eV
原子質量単位	u

$$1 \text{ eV} = 1.60218 \times 10^{-19} \text{ J}$$

$$1 \text{ u} = 1.66054 \times 10^{-27} \text{ kg}$$

表4 SIと共に暫定的に維持される単位

名称	記号
オングストローム	Å
バ	b
バール	bar
ガリ	Gal
キュリー	Ci
レントゲン	R
ラド	rad
レム	rem

$$1 \text{ Å} = 0.1 \text{ nm} = 10^{-10} \text{ m}$$

$$1 \text{ b} = 100 \text{ fm} = 10^{-28} \text{ m}^2$$

$$1 \text{ bar} = 0.1 \text{ MPa} = 10^5 \text{ Pa}$$

$$1 \text{ Gal} = 1 \text{ cm/s}^2 = 10^{-2} \text{ m/s}^2$$

$$1 \text{ Ci} = 3.7 \times 10^{10} \text{ Bq}$$

$$1 \text{ R} = 2.58 \times 10^{-4} \text{ C/kg}$$

$$1 \text{ rad} = 1 \text{ cGy} = 10^{-2} \text{ Gy}$$

$$1 \text{ rem} = 1 \text{ cSv} = 10^{-2} \text{ Sv}$$

表5 SI接頭語

倍数	接頭語	記号
10 <sup>18</sup>	エクサ	E
10 <sup>15</sup>	ペタ	P
10 <sup>12</sup>	テラ	T
10 <sup>9</sup>	ギガ	G
10 <sup>6</sup>	メガ	M
10 <sup>3</sup>	キロ	k
10 <sup>2</sup>	ヘクト	h
10 <sup>1</sup>	デカ	da
10 <sup>-1</sup>	デシ	d
10 <sup>-2</sup>	センチ	c
10 <sup>-3</sup>	ミリ	m
10 <sup>-6</sup>	マイクロ	μ
10 <sup>-9</sup>	ナノ	n
10 <sup>-12</sup>	ピコ	p
10 <sup>-15</sup>	フェムト	f
10 <sup>-18</sup>	アト	a

(注)

- 表1～5は「国際単位系」第5版, 国際度量衡局 1985年刊行による。ただし, 1 eV および 1 uの値はCODATAの1986年推奨値によった。
- 表4には海里, ノット, アール, ヘクタールも含まれているが日常の単位なのでここでは省略した。
- barは, JISでは流体の圧力を表わす場合に限り表2のカテゴリーに分類されている。
- EC閣僚理事会指令ではbar, barnおよび「血圧の単位」mmHgを表2のカテゴリーに入れている。

換 算 表

力	N (=10 <sup>5</sup> dyn)	kgf	lbf
	1	0.101972	0.224809
	9.80665	1	2.20462
	4.44822	0.453592	1

$$\text{粘 度 } 1 \text{ Pa} \cdot \text{s} (\text{N} \cdot \text{s} / \text{m}^2) = 10 \text{ P (ポアズ)} (\text{g} / (\text{cm} \cdot \text{s}))$$

$$\text{動粘度 } 1 \text{ m}^2 / \text{s} = 10^4 \text{ St (ストークス)} (\text{cm}^2 / \text{s})$$

圧	MPa (=10 bar)	kgf/cm <sup>2</sup>	atm	mmHg (Torr)	lbf/in <sup>2</sup> (psi)
	1	10.1972	9.86923	7.50062 × 10 <sup>3</sup>	145.038
力	0.0980665	1	0.967841	735.559	14.2233
	0.101325	1.03323	1	760	14.6959
	1.33322 × 10 <sup>-4</sup>	1.35951 × 10 <sup>-3</sup>	1.31579 × 10 <sup>-3</sup>	1	1.93368 × 10 <sup>-2</sup>
	6.89476 × 10 <sup>-3</sup>	7.03070 × 10 <sup>-2</sup>	6.80460 × 10 <sup>-2</sup>	51.7149	1

エネルギー・仕事・熱量	J (=10 <sup>7</sup> erg)	kgf·m	kW·h	cal (計量法)	Btu	ft·lbf	eV
	1	0.101972	2.77778 × 10 <sup>-7</sup>	0.238889	9.47813 × 10 <sup>-4</sup>	0.737562	6.24150 × 10 <sup>18</sup>
	9.80665	1	2.72407 × 10 <sup>-6</sup>	2.34270	9.29487 × 10 <sup>-3</sup>	7.23301	6.12082 × 10 <sup>19</sup>
	3.6 × 10 <sup>6</sup>	3.67098 × 10 <sup>5</sup>	1	8.59999 × 10 <sup>5</sup>	3412.13	2.65522 × 10 <sup>6</sup>	2.24694 × 10 <sup>25</sup>
	4.18605	0.426858	1.16279 × 10 <sup>-6</sup>	1	3.96759 × 10 <sup>-3</sup>	3.08747	2.61272 × 10 <sup>19</sup>
	1055.06	107.586	2.93072 × 10 <sup>-4</sup>	252.042	1	778.172	6.58515 × 10 <sup>21</sup>
	1.35582	0.138255	3.76616 × 10 <sup>-7</sup>	0.323890	1.28506 × 10 <sup>-3</sup>	1	8.46233 × 10 <sup>18</sup>
	1.60218 × 10 <sup>-19</sup>	1.63377 × 10 <sup>-20</sup>	4.45050 × 10 <sup>-28</sup>	3.82743 × 10 <sup>-20</sup>	1.51857 × 10 <sup>-22</sup>	1.18171 × 10 <sup>-19</sup>	1

$$1 \text{ cal} = 4.18605 \text{ J (計量法)}$$

$$= 4.184 \text{ J (熱化学)}$$

$$= 4.1855 \text{ J (15 °C)}$$

$$= 4.1868 \text{ J (国際蒸気表)}$$

$$\text{仕事率 } 1 \text{ PS (仏馬力)}$$

$$= 75 \text{ kgf} \cdot \text{m/s}$$

$$= 735.499 \text{ W}$$

放射能	Bq	Ci
	1	2.70270 × 10 <sup>-11</sup>
	3.7 × 10 <sup>10</sup>	1

吸収線量	Gy	rad
	1	100
	0.01	1

照射線量	C/kg	R
	1	3876
	2.58 × 10 <sup>-4</sup>	1

線量当量	Sv	rem
	1	100
	0.01	1

(86年12月26日現在)

