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Example 10: A Bombing Mission, page 68, Chapter 02

Consider a bomber attempting to destroy an ammunition depot. (This bomber has conventional rather than laser-guided weapons). If a bomb falls anywhere inside the target, a hit is scored; otherwise, the bomb is a miss. (Note that when a bomb appears visually to have touched a boundary line, it may or may not have hit the target; the model determines mathematically whether a hit has occurred, using the (X,Y) coordinates and the equations of the piecewise-linear boundary of the depot.)

The bomber flies in the horizontal direction and carries 10 bombs. The aiming point is (0,0). The actual point of impact is assumed to be normally distributed around the aiming point with a standard deviation of 400 meters in the direction of flight and 200 meters in the perpendicular direction. The problem is to simulate the operation and estimate the number of bombs on target.

Recall that the standardized normal variate Z, having mean $\mu = 0$, and standard deviation $\sigma = 1$, is distributed as

$$Z = \frac{X - \mu}{\sigma}$$

Where X is a normal random variable, Then, with mean zero and standard deviations given by

$\sigma_X = 400$ and $\sigma_Y = 200$, we have

$$Z_X = \frac{X}{400}, Z_Y = \frac{Y}{200}$$

Where (X,Y) are the simulated coordinates where the bomb hits.

Number of Hits	Number of Miss	No. of Trials	Probability of Hits	Probability of Misses	PDF
200	370	570	0.351	0.649	1

σ_X	=	400	X range: $X_{low} \leq X \leq X_{high}$, Y range: $Y_{low} \leq Y \leq Y_{high}$,
σ_Y	=	200	

**Z_X and Z_Y
Random Normal Number,**

X_{low}	=	-1300
X_{high}	=	1300
Y_{low}	=	-200
Y_{high}	=	200

Bomb	Z_X	σ_X	X	Z_Y	σ_Y	Y	Hit Or Miss?
1	-0.441669019	400	-176.6676078	-1.6889443	200	-337.78887	Miss
2	-0.21175175	400	-84.70070006	1.48485601	200	296.971202	Miss
3	-2.02403796	400	-809.6151838	0.69586016	200	139.172033	Hit
4	-0.703942999	400	-281.5771996	-1.8049108	200	-360.98217	Miss
5	-0.093498883	400	-37.39955328	-0.9705049	200	-194.10099	Hit
6	1.104881622	400	441.9526488	-0.1918383	200	-38.367652	Hit
7	-1.696214334	400	-678.4857336	-0.6221551	200	-124.43102	Hit
8	-0.088542011	400	-35.41680441	-0.5726654	200	-114.53307	Hit
9	0.897733449	400	359.0933795	-1.892808	200	-378.5616	Miss
10	1.029703613	400	411.8814451	1.04719012	200	209.438023	Miss
11	-0.31961125	401	-128.1641111	-0.3204903	201	-64.418556	Hit
12	0.338364615	402	136.0225752	-1.3355093	202	-269.77287	Miss
13	-1.002098421	403	-403.8456638	0.42891555	203	87.0698567	Hit
14	0.405136814	404	163.6752727	0.01634195	204	3.33375846	Hit
15	-1.361203826	405	-551.2875496	-0.4525497	205	-92.772692	Hit
16	-0.08400824	406	-34.10734556	-0.1650278	206	-33.995725	Hit
17	-0.079839849	407	-32.49481863	0.37554841	207	77.7385199	Hit
18	-0.828488288	408	-338.0232213	1.72031159	208	357.824812	Miss
19	0.888962652	409	363.5857247	0.37176372	209	77.6986165	Hit
20	0.955592134	410	391.7927751	1.50344378	210	315.723194	Miss
21	0.883579637	411	363.1512306	-0.6816361	211	-143.82522	Hit
22	0.153792358	412	63.36245139	1.33187544	212	282.357594	Miss
23	-0.000726832	413	-0.300181701	-0.7214016	213	-153.65855	Hit
24	0.108885659	414	45.07866285	-0.0509602	214	-10.905474	Hit
25	-1.961616499	415	-814.0708471	-0.5892101	215	-126.68017	Hit
26	-0.974476242	416	-405.3821166	2.14800401	216	463.968866	Miss
27	-0.575088971	417	-239.8121009	0.1177284	217	25.5470628	Hit
28	0.496963276	418	207.7306495	1.45046894	218	316.202229	Miss
29	-1.023600209	419	-428.8884877	-1.2159313	219	-266.28895	Miss
30	0.375715952	420	157.8007	0.88912521	220	195.607546	Hit
31	0.807867504	421	340.1122193	-0.0819159	221	-18.103403	Hit
32	0.961025338	422	405.5526927	1.84729883	222	410.10034	Miss
33	0.811105289	423	343.0975371	-2.0004529	223	-446.10099	Miss
34	-0.055169788	424	-23.39199005	0.35359409	224	79.2050762	Hit
35	0.908049637	425	385.9210959	-0.9410572	225	-211.73786	Miss
36	-0.336082307	426	-143.1710627	1.46270298	226	330.570872	Miss
37	-1.678832863	427	-716.8616324	0.96868434	227	219.891346	Miss
38	-2.022895824	428	-865.7994126	2.33157116	228	531.598224	Miss
39	1.343986825	429	576.5703481	-0.1700944	229	-38.951607	Hit
40	-0.696110836	430	-299.3276594	2.25206129	230	517.974096	Miss
41	-1.832222497	431	-789.6878961	-0.2584778	231	-59.708369	Hit

42	0.385420108	432	166.5014867	-0.3256257	232	-75.545173	Hit
43	0.220501045	433	95.47695253	-0.7377041	233	-171.88505	Hit
44	-0.072533827	434	-31.47968089	-0.0115339	234	-2.6989333	Hit
45	0.650482695	435	282.9599721	1.19431038	235	280.662939	Miss
46	-0.269299716	436	-117.4146763	-1.0181162	236	-240.27542	Miss
47	-0.356002531	437	-155.573106	-0.2466361	237	-58.452757	Hit
48	-0.458058287	438	-200.6295299	-1.3722293	238	-326.59057	Miss
49	-3.305307999	439	-1451.030212	-0.5059821	239	-120.92973	Miss
50	-0.497357336	440	-218.837228	0.08044796	240	19.3075096	Hit
51	0.540105869	441	238.186688	0.21800294	241	52.5387079	Hit
52	0.131570484	442	58.15415379	-0.0295042	242	-7.1400169	Hit
53	0.947889631	443	419.9151064	-0.1713706	243	-41.643053	Hit
54	-1.118351228	444	-496.5479451	0.49654923	244	121.158013	Hit
55	-1.129496272	445	-502.6258411	0.90743265	245	222.321	Miss
56	0.242602631	446	108.2007735	-0.5656935	246	-139.16061	Hit
57	0.761840188	447	340.5425639	0.31006307	247	76.5855792	Hit
58	-0.838559863	448	-375.6748187	-0.9717683	248	-240.99853	Miss
59	-0.390278548	449	-175.235068	0.10729734	249	26.7170366	Hit
60	0.166563943	450	74.95377422	1.42810963	250	357.027407	Miss
61	-1.008754464	451	-454.9482631	-0.1539043	251	-38.629969	Hit
62	-0.734719488	452	-332.0932088	0.19328698	252	48.7083195	Hit
63	0.386366467	453	175.0240093	0.11452598	253	28.9750724	Hit
64	-1.867220446	454	-847.7180823	-0.6719955	254	-170.68685	Hit
65	0.881629692	455	401.1415098	-0.9354016	255	-238.52741	Miss
66	-1.256404896	456	-572.9206325	-0.1762708	256	-45.12532	Hit
67	-0.112580669	457	-51.44936576	-0.8853282	257	-227.52935	Miss
68	0.269939313	458	123.6322052	-0.9407185	258	-242.70538	Miss
69	0.110640306	459	50.7839006	-2.5970781	259	-672.64324	Miss
70	0.81196051	460	373.5018345	-0.4857249	260	-126.28847	Hit
71	0.736354329	461	339.4593455	-0.6887234	261	-179.7568	Hit
72	-0.591282242	462	-273.1723957	1.02152642	262	267.639922	Miss
73	-1.674273818	463	-775.188778	-0.3172709	263	-83.442255	Hit
74	-0.095226719	464	-44.18519764	-0.2257917	264	-59.608996	Hit
75	0.283388582	465	131.7756907	-0.5301482	265	-140.48928	Hit
76	-1.011157368	466	-471.1993334	-1.2166288	266	-323.62326	Miss
77	-0.590586389	467	-275.8038434	-0.3268685	267	-87.273888	Hit
78	1.275509214	468	596.9383124	1.21498683	268	325.616471	Miss
79	1.081762858	469	507.3467805	0.19816359	269	53.3060052	Hit
80	-1.563203325	470	-734.7055626	0.00584352	270	1.57775062	Hit
81	0.108206063	471	50.96505553	1.33557065	271	361.939646	Miss
82	-0.168349349	472	-79.46089272	-0.212434	272	-57.782052	Hit
83	-0.076417987	473	-36.14570768	1.5707365	273	428.811065	Miss
84	0.779044913	474	369.2672886	-0.0277563	274	-7.6052325	Hit
85	-1.560088226	475	-741.0419072	-0.0900438	275	-24.762053	Hit

86	0.012880119	476	6.130936673	1.09372454	276	301.867974	Miss
87	-1.553920289	477	-741.2199779	-0.7869534	277	-217.98609	Miss
88	0.24502313	478	117.121056	-0.6631801	278	-184.36407	Hit
89	-0.091309025	479	-43.73702285	-0.7703164	279	-214.91828	Miss
90	2.024406231	480	971.714991	-1.2557785	280	-351.61797	Miss
91	0.5987994	481	288.0225114	-0.5127055	281	-144.07024	Hit
92	0.800930742	482	386.0486176	0.31097498	282	87.694944	Hit
93	1.493765447	483	721.4887108	1.48111488	283	419.15551	Miss
94	-1.387409849	484	-671.506367	-0.3202168	284	-90.941575	Hit
95	0.373844903	485	181.314778	-1.073605	285	-305.97743	Miss
96	-1.201179703	486	-583.7733359	0.44838001	286	128.236683	Hit
97	-0.406931338	487	-198.1755615	-0.016589	287	-4.7610529	Hit
98	0.268104947	488	130.8352143	0.66511525	288	191.553193	Hit
99	-0.248468701	489	-121.5011948	-0.0945674	289	-27.329965	Hit
100	-0.03107479	490	-15.22664706	-0.7744216	290	-224.58227	Miss
101	0.060891811	491	29.89787934	-1.1922171	291	-346.93518	Miss
102	1.921503606	492	945.3797741	-1.1837885	292	-345.66624	Miss
103	1.251913899	493	617.1935523	-1.5042823	293	-440.75472	Miss
104	1.583059172	494	782.031231	1.44468682	294	424.737924	Miss
105	-0.155429664	495	-76.93768348	-1.4957702	295	-441.2522	Miss
106	1.109121422	496	550.1242253	-0.8609025	296	-254.82713	Miss
107	0.508487768	497	252.7184206	0.5196977	297	154.350216	Hit
108	0.086177195	498	42.91624318	-0.4889206	298	-145.69833	Hit
109	0.543699065	499	271.3058337	0.85245987	299	254.885502	Miss
110	0.220519424	500	110.2597118	2.29167666	300	687.502999	Miss
111	1.033568372	501	517.8177543	-0.5244284	301	-157.85294	Hit
112	-0.21741314	502	-109.1413965	-0.5950315	302	-179.69952	Hit
113	0.868294489	503	436.7521279	-2.2397141	303	-678.63337	Miss
114	-0.348968227	504	-175.8799866	-0.9916342	304	-301.45678	Miss
115	-0.72000798	505	-363.6040297	-0.9093192	305	-277.34235	Miss
116	-0.449602372	506	-227.4988003	0.56162413	306	171.856983	Hit
117	0.025230807	507	12.79201931	1.81860572	307	558.311956	Miss
118	-0.770990951	508	-391.6634029	0.14314164	308	44.0876248	Hit
119	-0.986556396	509	-502.1572058	-0.51975	309	-160.60275	Hit
120	-0.458864558	510	-234.0209243	-0.1770982	310	-54.900447	Hit
121	-0.300287138	511	-153.4467273	-1.4885446	311	-462.93739	Miss
122	-1.022481409	512	-523.5104814	0.21729802	312	67.7969829	Hit
123	0.020065266	513	10.29348142	-0.1198707	313	-37.519516	Hit
124	0.262106173	514	134.7225729	-0.1429771	314	-44.894805	Hit
125	0.965379811	515	497.1706025	1.13721906	315	358.224004	Miss
126	-0.773780715	516	-399.2708492	1.12745181	316	356.274771	Miss
127	0.222632906	517	115.1012125	0.50394323	317	159.750005	Hit
128	-0.272342611	518	-141.0734727	-0.37718	318	-119.94323	Hit
129	0.027156737	519	14.09434632	-0.3254645	319	-103.82319	Hit

130	-1.561708888	520	-812.0886218	-1.9469617	320	-623.02773	Miss
131	-0.251807677	521	-131.1917996	0.92522501	321	296.997228	Miss
132	0.861856037	522	449.8888513	0.70163136	322	225.925297	Miss
133	-0.043718159	523	-22.86459721	-1.0041504	323	-324.34059	Miss
134	-0.016040451	524	-8.405196213	1.44827524	324	469.241178	Miss
135	0.562568196	525	295.348303	-0.5258851	325	-170.91267	Hit
136	0.488064366	526	256.7218563	0.38430335	326	125.282893	Hit
137	1.33453804	527	703.3015469	-0.5495176	327	-179.69226	Hit
138	-1.802922866	528	-951.9432734	-0.8120434	328	-266.35025	Miss
139	2.042584037	529	1080.526956	-2.9786979	329	-979.99161	Miss
140	2.341954528	530	1241.2359	2.22466625	330	734.139863	Miss
141	0.568037476	531	301.6278999	0.6126652	331	202.792182	Miss
142	-1.55765799	532	-828.6740507	2.21719686	332	736.109358	Miss
143	-1.813768183	533	-966.7384416	-0.5271138	333	-175.5289	Hit
144	2.296547091	534	1226.356147	-0.3556643	334	-118.79189	Hit
145	3.225205538	535	1725.484963	0.35519461	335	118.990196	Miss
146	0.060822059	536	32.60062366	1.41499053	336	475.436819	Miss
147	-0.608732513	537	-326.8893594	1.67067016	337	563.015843	Miss
148	0.894518819	538	481.2511248	1.74761934	338	590.695338	Miss
149	-1.193130887	539	-643.0975483	0.52111389	339	176.65761	Hit
150	0.015193587	540	8.204537219	0.84290141	340	286.58648	Miss
151	0.147894444	541	80.01089401	0.9513235	341	324.401312	Miss
152	1.133767116	542	614.5017768	-0.4303905	342	-147.19354	Hit
153	-0.049665344	543	-26.96828193	1.50951796	343	517.76466	Miss
154	0.463904819	544	252.3642217	-0.6431106	344	-221.23004	Miss
155	0.615106776	545	335.2331932	-0.2686313	345	-92.677806	Hit
156	-1.876783925	546	-1024.724023	-0.8962428	346	-310.10002	Miss
157	-0.108752146	547	-59.48742396	-0.3300517	347	-114.52795	Hit
158	-1.472763631	548	-807.0744699	0.55377045	348	192.712116	Hit
159	0.098891999	549	54.29170771	1.27859053	349	446.228096	Miss
160	-0.399297037	550	-219.6133705	0.17220527	350	60.2718457	Hit
161	0.456487147	551	251.5244181	0.0164603	351	5.77756561	Hit
162	-0.417486363	552	-230.4524721	-0.901251	352	-317.24036	Miss
163	0.04669373	553	25.82163258	-0.0595305	353	-21.014278	Hit
164	0.124291294	554	68.85737663	-0.6506365	354	-230.32531	Miss
165	1.837647141	555	1019.894163	1.38043084	355	490.052948	Miss
166	-0.9870056	556	-548.7751137	0.12729071	356	45.3154925	Hit
167	-0.543103258	557	-302.5085148	-0.2701602	357	-96.447182	Hit
168	-0.662824174	558	-369.8558891	-0.0822597	358	-29.448967	Hit
169	0.641896122	559	358.8199324	-1.3146566	359	-471.96173	Miss
170	-1.292890183	560	-724.0185025	0.78216597	360	281.579749	Miss
171	-0.347433514	561	-194.9102016	1.4540258	361	524.903315	Miss
172	-0.273923521	562	-153.9450185	0.18935205	362	68.5454412	Hit
173	0.633840697	563	356.8523122	2.31059388	363	838.74558	Miss

174	0.63920459	564	360.5113887	0.26599965	364	96.8238714	Hit
175	0.464063763	565	262.1960258	2.00310684	365	731.133996	Miss
176	-1.310817221	566	-741.922547	-1.4120241	366	-516.80081	Miss
177	0.551478573	567	312.6883511	0.96002584	367	352.329483	Miss
178	1.350252872	568	766.9436315	2.02410176	368	744.869449	Miss
179	1.385068404	569	788.103922	-1.6718629	369	-616.91741	Miss
180	-0.798745219	570	-455.284775	-2.4875705	370	-920.40107	Miss
181	-1.233403305	571	-704.273287	1.60554256	371	595.656288	Miss
182	-0.858306076	572	-490.9510753	1.81688412	372	675.880892	Miss
183	0.092625219	573	53.07425051	-1.4066409	373	-524.67705	Miss
184	-1.304320223	574	-748.6798081	0.04125059	374	15.4277194	Hit
185	-0.771671415	575	-443.7110636	0.65988816	375	247.458061	Miss
186	0.638694867	576	367.8882436	-0.0563466	376	-21.186339	Hit
187	0.868503418	577	501.1264725	-0.3760156	377	-141.75787	Hit
188	1.981267195	578	1145.172439	-0.810429	378	-306.34216	Miss
189	-0.396683658	579	-229.6798378	-1.0886853	379	-412.61172	Miss
190	-0.459781906	580	-266.6735056	-1.005934	380	-382.2549	Miss
191	-0.249879839	581	-145.1801867	0.4719921	381	179.82899	Hit
192	0.77489604	582	450.9894952	-0.443055	382	-169.24703	Hit
193	-0.197618245	583	-115.211437	-1.0342388	383	-396.11344	Miss
194	0.130205844	584	76.04021318	0.33333012	384	127.998765	Hit
195	1.865321007	585	1091.212789	0.87450547	385	336.684607	Miss
196	-0.462148597	586	-270.8190779	-0.816673	386	-315.23577	Miss
197	0.144016332	587	84.53758675	0.43905377	387	169.913808	Hit
198	0.073709198	588	43.34100826	-0.7929035	388	-307.64655	Miss
199	-0.572754317	589	-337.352293	-1.6136083	389	-627.69363	Miss
200	-0.690771	590	-407.5548902	1.25636216	390	489.981242	Miss
201	-0.760717696	591	-449.5841586	-0.208434	391	-81.49769	Hit
202	-0.481887232	592	-285.2772414	-1.2637275	392	-495.38117	Miss
203	1.837007876	593	1089.345671	0.32838504	393	129.055321	Hit
204	1.405261635	594	834.7254114	-0.452799	394	-178.4028	Hit
205	-0.389005083	595	-231.4580244	-2.2169541	395	-875.69687	Miss
206	1.429276131	596	851.8485743	0.17302583	396	68.5182293	Hit
207	0.929652904	597	555.0027834	0.10907648	397	43.3033637	Hit
208	-0.696436458	598	-416.4690022	1.05321813	398	419.180817	Miss
209	-1.005627237	599	-602.3707151	1.08079477	399	431.237115	Miss
210	-1.620930092	600	-972.5580552	1.87734923	400	750.939691	Miss
211	-0.305721472	601	-183.7386048	0.04463457	401	17.8984635	Hit
212	-1.217042272	602	-732.6594478	0.15348903	402	61.7025898	Hit
213	-0.861000614	603	-519.1833705	-0.2832645	403	-114.15559	Hit
214	-0.006057221	604	-3.658561208	-0.6698758	404	-270.62984	Miss
215	0.886242685	605	536.1768245	-1.1068487	405	-448.27373	Miss
216	0.790815332	606	479.2340911	-1.3499405	406	-548.07582	Miss
217	-0.968891857	607	-588.1173571	0.57760818	407	235.086528	Miss

218	-1.572155355	608	-955.8704561	-0.1132378	408	-46.201017	Hit
219	-1.171076054	609	-713.1853169	0.28067822	409	114.797391	Hit
220	-1.130058553	610	-689.3357173	-0.16006	410	-65.624615	Hit
221	-0.471213984	611	-287.9117442	0.10033571	411	41.2379788	Hit
222	0.916553884	612	560.9309769	0.63518996	412	261.698264	Miss
223	1.939749325	613	1189.066336	0.17692121	413	73.0684596	Hit
224	0.443413283	614	272.2557558	-1.0280112	414	-425.59666	Miss
225	-1.446331239	615	-889.4937122	-0.6091818	415	-252.81044	Miss
226	-1.508466572	616	-929.2154086	1.09062022	416	453.698011	Miss
227	0.384035814	617	236.9500975	1.68672001	417	703.362246	Miss
228	0.778432832	618	481.0714902	0.67765939	418	283.261626	Miss
229	1.948561303	619	1206.159447	0.15568017	419	65.2299901	Hit
230	-1.346210962	620	-834.6507966	-0.6199742	420	-260.38915	Miss
231	-0.544930235	621	-338.401676	2.15643291	421	907.858256	Miss
232	-0.445097432	622	-276.8506025	-0.1395914	422	-58.90757	Hit
233	-0.487823425	623	-303.9139936	0.07818585	423	33.072615	Hit
234	0.540006757	624	336.9642166	1.21555616	424	515.395813	Miss
235	-2.284596451	625	-1427.872782	-0.1095809	425	-46.571878	Miss
236	0.764792744	626	478.7602579	1.43034344	426	609.326303	Miss
237	-0.77224594	627	-484.1982042	1.79577237	427	766.794803	Miss
238	-0.062239872	628	-39.08663991	1.49427334	428	639.548991	Miss
239	0.296318204	629	186.3841506	0.0780121	429	33.4671909	Hit
240	-1.761267034	630	-1109.598231	0.48088702	430	206.781419	Miss
241	-1.240590877	631	-782.8128433	-0.0963365	431	-41.521028	Hit
242	-0.044435172	632	-28.08302858	-1.0115088	432	-436.9718	Miss
243	0.063910658	633	40.45544633	-0.3711048	433	-160.68838	Hit
244	-0.612375642	634	-388.2461569	-0.0329265	434	-14.290087	Hit
245	0.355312329	635	225.6233291	-0.9205819	435	-400.45315	Miss
246	1.370283359	636	871.5002162	0.29672392	436	129.371631	Hit
247	0.747752591	637	476.3184004	-0.7042857	437	-307.77285	Miss
248	0.902076867	638	575.5250412	-1.1794208	438	-516.58631	Miss
249	-0.610320837	639	-389.9950147	-0.3733174	439	-163.88634	Hit
250	1.012349968	640	647.9039798	-0.0534997	440	-23.539849	Hit
251	0.737535397	641	472.7601897	-0.3861517	441	-170.29292	Hit
252	3.229507475	642	2073.343799	0.75961214	442	335.748566	Miss
253	0.700845534	643	450.6436787	0.50777702	443	224.94522	Miss
254	-0.334211051	644	-215.2319172	-1.1760437	444	-522.16342	Miss
255	-0.523640183	645	-337.7479182	-0.1821848	445	-81.072258	Hit
256	0.12955059	646	83.6896814	0.72921231	446	325.228688	Miss
257	-1.480534913	647	-957.9060887	-0.6060298	447	-270.8953	Miss
258	-0.692438419	648	-448.7000955	0.64100151	448	287.168675	Miss
259	0.24635415	649	159.8838433	0.81895827	449	367.712263	Miss
260	1.459329226	650	948.5639972	0.35983148	450	161.924166	Hit
261	-0.971023363	651	-632.1362095	-1.5583849	451	-702.83157	Miss

262	0.265587298	652	173.1629182	-0.6087984	452	-275.17688	Miss
263	0.556502053	653	363.3958408	-0.0027197	453	-1.2320017	Hit
264	-0.551138173	654	-360.444365	-0.1998978	454	-90.753592	Hit
265	0.17868301	655	117.0373714	0.08854788	455	40.2892837	Hit
266	1.26179548	656	827.7378351	1.54519271	456	704.607878	Miss
267	0.413054024	657	271.3764938	0.31896227	457	145.765758	Hit
268	-1.895633694	658	-1247.326971	1.42321635	458	651.83309	Miss
269	0.873783174	659	575.8231116	0.6663586	459	305.858596	Miss
270	-0.165291509	660	-109.0923961	-0.6504116	460	-299.18933	Miss
271	-1.198145351	661	-791.9740767	-0.6516857	461	-300.42713	Miss
272	-0.026815302	662	-17.75172989	-0.8010211	462	-370.07173	Miss
273	1.025524684	663	679.9228654	-1.7306601	463	-801.29563	Miss
274	0.056522358	664	37.53084542	-0.5800123	464	-269.12573	Miss
275	1.589318447	665	1056.896767	-1.1802985	465	-548.83878	Miss
276	-2.221474876	666	-1479.502267	-0.9808885	466	-457.09404	Miss
277	-0.209462105	667	-139.7112242	-0.3894444	467	-181.87055	Hit
278	0.54251904	668	362.4027188	-1.3293909	468	-622.15495	Miss
279	-0.266651377	669	-178.389771	1.01911083	469	477.96298	Miss
280	-1.219864027	670	-817.3088981	-0.2410129	470	-113.27608	Hit
281	-1.743291312	671	-1169.74847	1.07020213	471	504.065203	Miss
282	-0.488373803	672	-328.1871958	1.40073749	472	661.148094	Miss
283	0.254003018	673	170.944031	0.00392222	473	1.85521131	Hit
284	0.039758629	674	26.79731608	-0.7749621	474	-367.33206	Miss
285	1.89136865	675	1276.673838	0.64013518	475	304.064212	Miss
286	-0.453352237	676	-306.466112	0.28691749	476	136.572725	Hit
287	0.098151893	677	66.44883179	0.43414174	477	207.085609	Miss
288	0.556355742	678	377.2091934	-0.1691318	478	-80.844994	Hit
289	-0.283776444	679	-192.6842055	-1.2636224	479	-605.27511	Miss
290	0.087782263	680	59.69193899	-0.2475806	480	-118.83871	Hit
291	0.338231823	681	230.3358718	0.06949237	481	33.4258286	Hit
292	0.220035456	682	150.0641809	1.25290334	482	603.899409	Miss
293	-1.106085715	683	-755.4565432	0.25982974	483	125.497766	Hit
294	0.240911943	684	164.7837692	-1.3391973	484	-648.17149	Miss
295	0.398826969	685	273.1964737	0.6118991	485	296.771063	Miss
296	1.314727448	686	901.9030293	1.26601542	486	615.283496	Miss
297	-1.044565121	687	-717.6162381	-1.7732233	487	-863.55976	Miss
298	-0.121830231	688	-83.81919908	-1.4894889	488	-726.87058	Miss
299	0.405530739	689	279.410679	-0.6414515	489	-313.66976	Miss
300	0.552177037	690	381.0021556	1.13268365	490	555.014988	Miss
301	0.205431127	691	141.9529089	-2.336294	491	-1147.1204	Miss
302	-0.366911871	692	-253.9030147	0.00826397	492	4.0658721	Hit
303	0.994397129	693	689.1172103	0.02776515	493	13.6882173	Hit
304	-1.18843742	694	-824.7755692	0.7976637	494	394.045868	Miss
305	-0.333811659	695	-231.9991029	-1.7596424	495	-871.02299	Miss

306	0.65234244	696	454.0303382	-0.5645326	496	-280.00816	Miss
307	0.028455418	697	19.83342626	0.25777189	497	128.112629	Hit
308	0.367680749	698	256.6411628	0.29888422	498	148.844344	Hit
309	0.750686771	699	524.7300527	0.60420003	499	301.495815	Miss
310	1.529733807	700	1070.813665	1.37447676	500	687.23838	Miss
311	0.341489605	701	239.3842134	-0.9882979	501	-495.13726	Miss
312	0.97098479	702	681.6313229	0.09740458	502	48.8970999	Hit
313	0.703226523	703	494.3682454	-0.6209113	503	-312.3184	Miss
314	0.677340876	704	476.8479767	0.8965637	504	451.868104	Miss
315	-1.312299584	705	-925.171207	1.78740328	505	902.638658	Miss
316	-0.843487853	706	-595.5024242	1.12713064	506	570.328101	Miss
317	0.831433044	707	587.8231622	1.50007267	507	760.536846	Miss
318	-0.678095054	708	-480.0912984	1.85853432	508	944.135433	Miss
319	-0.929495174	709	-659.0120781	2.09541461	509	1066.56604	Miss
320	1.188222762	710	843.6381613	1.4654022	510	747.35512	Miss
321	-1.086826307	711	-772.7335044	-0.7894518	511	-403.40987	Miss
322	0.97698705	712	695.6147795	0.26501605	512	135.688217	Hit
323	-1.06324806	713	-758.0958668	0.81070853	513	415.893476	Miss
324	-0.519154703	714	-370.676458	1.56382151	514	803.804257	Miss
325	-0.289875361	715	-207.2608832	-0.2261959	515	-116.49088	Hit
326	1.780259594	716	1274.665869	0.99308304	516	512.430848	Miss
327	0.355361118	717	254.7939214	1.42655453	517	737.52869	Miss
328	0.028380633	718	20.37729449	-0.1726682	518	-89.442106	Hit
329	2.687683093	719	1932.444144	1.45275656	519	753.980656	Miss
330	-0.406985977	720	-293.0299036	2.96629369	520	1542.47272	Miss
331	-2.524026765	721	-1819.823298	-0.4172815	521	-217.40368	Miss
332	0.773143932	722	558.2099188	1.29697701	522	677.022	Miss
333	-0.036973061	723	-26.73152276	0.26811144	523	140.222284	Hit
334	1.04892095	724	759.4187678	0.5370939	524	281.437204	Miss
335	0.941857013	725	682.8463345	-0.9047748	525	-475.00679	Miss
336	-0.04337897	726	-31.49313216	-1.3548023	526	-712.626	Miss
337	-0.563524516	727	-409.6823228	2.38574917	527	1257.28981	Miss
338	-0.053630028	728	-39.04266006	0.73965859	528	390.539734	Miss
339	-1.092691279	729	-796.5719421	0.33271693	529	176.007257	Hit
340	1.084402578	730	791.6138818	0.32296356	530	171.170685	Hit
341	1.102357769	731	805.8235295	1.87608943	531	996.203488	Miss
342	-1.342269283	732	-982.5411155	0.47582735	532	253.140152	Miss
343	-1.947865482	733	-1427.785398	-0.809306	533	-431.3601	Miss
344	0.820522242	734	602.2633259	-3.2334823	534	-1726.6796	Miss
345	0.137725525	735	101.2282606	0.58460645	535	312.764448	Miss
346	1.314602616	736	967.547525	1.46671887	536	786.161315	Miss
347	-1.161723978	737	-856.1905715	1.04833522	537	562.956016	Miss
348	1.33019011	738	981.6803013	0.59521056	538	320.22328	Miss
349	-0.982578987	739	-726.1258717	-0.4387846	539	-236.50492	Miss

350	0.48285902	740	357.3156751	-1.9498697	540	-1052.9297	Miss
351	-0.038272661	741	-28.36004186	-0.147154	541	-79.610331	Hit
352	0.283367118	742	210.2584016	1.17722287	542	638.054793	Miss
353	0.384513198	743	285.6933062	-0.3944493	543	-214.18598	Miss
354	-1.190308023	744	-885.5891691	0.88111493	544	479.32652	Miss
355	0.049835471	745	37.12742595	0.25763467	545	140.410894	Hit
356	0.75442504	746	562.8010796	1.12365912	546	613.51788	Miss
357	1.765109724	747	1318.536963	1.17553219	547	643.016108	Miss
358	0.751743521	748	562.304154	0.36291287	548	198.876254	Hit
359	-1.037256883	749	-776.905405	2.72998731	549	1498.76303	Miss
360	-0.103607335	750	-77.70550137	-0.2920612	550	-160.63368	Hit
361	0.0322519	751	24.22117697	1.62558228	551	895.695835	Miss
362	0.231205856	752	173.8668036	-0.4703824	552	-259.65106	Miss
363	-0.557787138	753	-420.0137151	-0.5360293	553	-296.42422	Miss
364	1.282674555	754	967.1366144	1.89802936	554	1051.50827	Miss
365	0.42764898	755	322.8749803	0.37823932	555	209.922821	Miss
366	0.517014035	756	390.8626105	1.92484581	556	1070.21427	Miss
367	0.239544208	757	181.3349657	1.33187452	557	741.854105	Miss
368	-0.806817433	758	-611.5676143	0.02760434	558	15.4032229	Hit
369	-0.098145152	759	-74.49217032	1.5724192	559	878.982335	Miss
370	-0.485432719	760	-368.9288662	-0.1966458	560	-110.12167	Hit
371	-1.113750461	761	-847.5641011	-0.493002	561	-276.57412	Miss
372	-0.179499181	762	-136.7783762	-0.0815834	562	-45.84988	Hit
373	0.172054934	763	131.2779146	-1.1279923	563	-635.05965	Miss
374	-0.558441345	764	-426.6491878	-0.2328974	564	-131.35415	Hit
375	0.597202356	765	456.8598023	0.40694728	565	229.925213	Miss
376	-0.424071778	766	-324.8389819	0.45622385	566	258.222701	Miss
377	0.869451516	767	666.8693128	0.17574253	567	99.6460168	Hit
378	-1.067416727	768	-819.7760464	0.60374394	568	342.926557	Miss
379	-0.726110333	769	-558.3788462	-0.0609887	569	-34.702547	Hit
380	-0.406652221	770	-313.1222104	-0.5327603	570	-303.67336	Miss
381	-1.172394908	771	-903.9164737	-0.1677949	571	-95.810912	Hit
382	0.475417592	772	367.0223808	0.84072146	572	480.892676	Miss
383	0.719695961	773	556.324978	-0.555945	573	-318.55647	Miss
384	-1.23225572	774	-953.7659275	0.86293305	574	495.323569	Miss
385	-0.269964975	775	-209.2228555	-2.7865711	575	-1602.2784	Miss
386	-1.209994022	776	-938.9553609	0.35511856	576	204.548291	Miss
387	-0.457120286	777	-355.182462	-0.0447849	577	-25.840864	Hit
388	-0.273785599	778	-213.0051957	0.4941169	578	285.599566	Miss
389	-1.290560697	779	-1005.346783	0.37998762	579	220.012831	Miss
390	-0.164402878	780	-128.2342445	-1.3333982	580	-773.37094	Miss
391	2.486700063	781	1942.112749	-0.4290523	581	-249.27936	Miss
392	-1.358914409	782	-1062.671068	0.73104431	582	425.467787	Miss
393	-1.168596872	783	-915.0113508	0.04548899	583	26.5200827	Hit

394	-0.130380763	784	-102.2185186	-1.4674836	584	-857.01045	Miss
395	1.81370556	785	1423.758865	-2.0310309	585	-1188.1531	Miss
396	-0.908531644	786	-714.105872	-0.2895269	586	-169.66277	Hit
397	0.181229331	787	142.6274834	1.04970263	587	616.175446	Miss
398	-0.703940555	788	-554.7051573	-0.0526479	588	-30.956953	Hit
399	-0.962225716	789	-759.1960897	-0.2386439	589	-140.56127	Hit
400	0.776295068	790	613.2731038	-0.5466863	590	-322.5449	Miss
401	-0.821905479	791	-650.127234	0.52567872	591	310.676124	Miss
402	-0.074083352	792	-58.67401476	0.48192525	592	285.29975	Miss
403	-1.656615337	793	-1313.695962	-1.1026068	593	-653.84581	Miss
404	-0.272182675	794	-216.1130442	2.45858377	594	1460.39876	Miss
405	0.697764	795	554.7223799	0.92273675	595	549.028364	Miss
406	-1.56906925	796	-1248.979123	-0.1056951	596	-62.994296	Hit
407	-1.38555062	797	-1104.283844	-0.0686888	597	-41.007208	Hit
408	0.043174146	798	34.45296827	0.25363086	598	151.671253	Hit
409	-0.078589862	799	-62.79329965	-0.8513007	599	-509.9291	Miss
410	-0.55922143	800	-447.3771436	-0.2078535	600	-124.71208	Hit
411	1.116443825	801	894.2715037	0.84235149	601	506.253245	Miss
412	0.598467175	802	479.9706742	0.82936085	602	499.275232	Miss
413	0.869358279	803	698.0946983	0.30205787	603	182.140893	Hit
414	0.579924413	804	466.2592278	-0.2141904	604	-129.37099	Hit
415	2.02591392	805	1630.860706	-0.9477768	605	-573.40499	Miss
416	0.364730238	806	293.9725715	-0.5939181	606	-359.91435	Miss
417	0.021031642	807	16.97253497	-0.5979104	607	-362.93164	Miss
418	-0.810749457	808	-655.0855613	-1.3630572	608	-828.73875	Miss
419	-0.693204365	809	-560.8023315	0.75670451	609	460.833047	Miss
420	-1.508765049	810	-1222.09969	-0.0859774	610	-52.446189	Hit
421	1.707898984	811	1385.106076	0.44572236	611	272.336363	Miss
422	0.307718537	812	249.8674524	-0.3853433	612	-235.83012	Miss
423	0.352745679	813	286.7822368	-0.4361978	613	-267.38922	Miss
424	0.233844917	814	190.3497626	0.42970972	614	263.841767	Miss
425	-0.928064275	815	-756.3723841	-1.8869946	615	-1160.5017	Miss
426	1.816753355	816	1482.470738	-1.6303173	616	-1004.2755	Miss
427	-0.288805955	817	-235.954465	0.56277412	617	347.231634	Miss
428	-0.336643187	818	-275.3741273	0.47343562	618	292.58321	Miss
429	-0.760334073	819	-622.7136059	-0.2267633	619	-140.36651	Hit
430	1.368351131	820	1122.047927	-0.2920834	620	-181.09173	Hit
431	-1.418426518	821	-1164.528171	-1.1466755	621	-712.08548	Miss
432	0.909914388	822	747.9496273	-0.5610473	622	-348.9714	Miss
433	-1.349776342	823	-1110.86593	0.06586498	623	41.0338809	Hit
434	-0.552992912	824	-455.6661591	1.06222973	624	662.831351	Miss
435	0.759135272	825	626.286599	0.07940495	625	49.6280936	Hit
436	0.361950455	826	298.9710758	-0.7930454	626	-496.44639	Miss
437	-1.971872912	827	-1630.738898	-0.5085672	627	-318.87163	Miss

438	-2.354089139	828	-1949.185807	-1.0434955	628	-655.31516	Miss
439	-0.186925449	829	-154.9611971	0.89477279	629	562.812087	Miss
440	-0.559771698	830	-464.6105097	-0.4482305	630	-282.38522	Miss
441	0.998085492	831	829.4090442	0.26479853	631	167.087872	Hit
442	1.591382784	832	1324.030477	-1.0806096	632	-682.94524	Miss
443	-0.630849496	833	-525.4976302	0.17332063	633	109.711959	Hit
444	-1.482014787	834	-1236.000332	-0.0368231	634	-23.345849	Hit
445	0.310444828	835	259.2214313	-0.8598058	635	-545.97669	Miss
446	-0.701204666	836	-586.2071009	-0.397176	636	-252.60397	Miss
447	0.74236738	837	621.3614968	-0.5874831	637	-374.22674	Miss
448	-0.628957183	838	-527.066119	0.31075794	638	198.263567	Hit
449	1.30757524	839	1097.055626	0.95725619	639	611.686708	Miss
450	-0.897125918	840	-753.5857713	0.59435841	640	380.38938	Miss
451	0.777538632	841	653.9099895	1.22032489	641	782.228252	Miss
452	0.382206078	842	321.8175175	-0.387524	642	-248.7904	Miss
453	-0.733491751	843	-618.3335465	-1.2694359	643	-816.24726	Miss
454	0.297779215	844	251.3256573	1.63678082	644	1054.08685	Miss
455	1.804020554	845	1524.397368	-0.05527	645	-35.649141	Miss
456	0.06233865	846	52.73849819	0.10634515	646	68.6989654	Hit
457	-0.219622588	847	-186.0203321	-3.078541	647	-1991.816	Miss
458	-0.575795409	848	-488.2745068	-1.6196486	648	-1049.5323	Miss
459	0.898686508	849	762.9848455	1.21504163	649	788.562021	Miss
460	-1.582625639	850	-1345.231793	-0.7454099	650	-484.51641	Miss
461	1.184632259	851	1008.122053	0.90493152	651	589.110421	Miss
462	0.497566935	852	423.9270287	-0.4968931	652	-323.97428	Miss
463	1.108114067	853	945.2212992	-0.4769753	653	-311.46489	Miss
464	-1.19615193	854	-1021.513748	0.4738439	654	309.893912	Miss
465	0.998406995	855	853.6379804	1.16941095	655	765.964172	Miss
466	0.06109384	856	52.2963269	-0.983255	656	-645.01525	Miss
467	-0.927329944	857	-794.7217618	0.24155851	657	158.703943	Hit
468	2.167586272	858	1859.789022	1.54771766	658	1018.39822	Miss
469	0.556689185	859	478.19601	0.19518905	659	128.629582	Hit
470	-0.618750377	860	-532.1253243	0.69667402	660	459.804856	Miss
471	-1.179020694	861	-1015.136817	-0.5128932	661	-339.02238	Miss
472	-0.684322358	862	-589.8858726	-1.0744277	662	-711.27115	Miss
473	0.549317618	863	474.0611042	1.01694225	663	674.23271	Miss
474	-1.83954318	864	-1589.365307	0.35407998	664	235.109108	Miss
475	-0.398088907	865	-344.3469049	1.23746468	665	822.914012	Miss
476	0.359849033	866	311.6292624	0.59654261	666	397.297376	Miss
477	-1.209671277	867	-1048.784997	-0.5261933	667	-350.97093	Miss
478	-0.846015618	868	-734.341556	0.45483332	668	303.828661	Miss
479	-0.44074051	869	-383.0035029	-1.3790522	669	-922.58592	Miss
480	0.15815083	870	137.5912217	1.5478591	670	1037.0656	Miss
481	-1.440680239	871	-1254.832488	0.03832407	671	25.7154543	Hit

482	-0.10649843	872	-92.86663078	0.18796924	672	126.31533	Hit
483	-0.551537009	873	-481.4918089	0.87129868	673	586.384014	Miss
484	0.620143189	874	542.005147	0.34564029	674	232.961557	Miss
485	1.015487672	875	888.5517132	-0.6310262	675	-425.94272	Miss
486	2.780170086	876	2435.428995	0.36713589	676	248.183862	Miss
487	1.888890034	877	1656.556559	0.91863741	677	621.917528	Miss
488	-0.168512327	878	-147.9538231	0.38131102	678	258.528871	Miss
489	-0.255217711	879	-224.3363678	-0.0438683	679	-29.786607	Hit
490	-1.2275374	880	-1080.232912	0.69742756	680	474.25074	Miss
491	-2.537538256	881	-2235.571203	1.32077106	681	899.445089	Miss
492	-0.83423425	882	-735.7946083	-0.6869697	682	-468.51332	Miss
493	-1.057539958	883	-933.8077832	0.039633	683	27.0693362	Hit
494	1.540972421	884	1362.21962	-1.0832073	684	-740.91377	Miss
495	0.551158042	885	487.7748668	-1.4150043	685	-969.27795	Miss
496	-1.426677615	886	-1264.036366	-0.620954	686	-425.97447	Miss
497	-0.385711776	887	-342.1263451	0.80697287	687	554.390364	Miss
498	-1.074084373	888	-953.7869236	0.86565515	688	595.570742	Miss
499	-0.472981161	889	-420.480252	-0.4756353	689	-327.71274	Miss
500	0.813648383	890	724.147061	-0.323851	690	-223.45717	Miss
501	-0.503357011	891	-448.4910969	-0.0055669	691	-3.8467132	Hit
502	-0.344822841	892	-307.5819743	0.33678623	692	233.056068	Miss
503	-1.28195611	893	-1144.786806	0.07590286	693	52.6006834	Hit
504	0.050653225	894	45.28398296	-0.776322	694	-538.7675	Miss
505	-0.291470456	895	-260.8660583	-0.7871612	695	-547.07705	Miss
506	-0.270592177	896	-242.4505906	2.49135619	696	1733.98391	Miss
507	0.511770157	897	459.057831	-0.1646266	697	-114.74475	Hit
508	0.475661278	898	427.1438276	-1.1514869	698	-803.73784	Miss
509	0.182096073	899	163.7043693	0.77722289	699	543.278802	Miss
510	-0.469801511	900	-422.8213603	1.22379172	700	856.654207	Miss
511	-0.742022571	901	-668.5623366	-0.1916317	701	-134.33381	Hit
512	-0.323028588	902	-291.3717864	2.11248645	702	1482.96549	Miss
513	-1.182357539	903	-1067.668858	0.18688839	703	131.382538	Hit
514	0.045032588	904	40.70945971	0.23274193	704	163.850319	Hit
515	-0.618938614	905	-560.1394454	-1.5308071	705	-1079.219	Miss
516	0.744854621	906	674.8382864	-1.2843061	706	-906.72013	Miss
517	0.82659025	907	749.717357	1.45306532	707	1027.31718	Miss
518	-0.4432921	908	-402.5092266	0.15908716	708	112.633708	Hit
519	-0.327319631	909	-297.5335449	-0.2775735	709	-196.79961	Hit
520	1.340211368	910	1219.592345	1.25336646	710	889.890185	Miss
521	-2.147494593	911	-1956.367575	-0.5104465	711	-362.92743	Miss
522	1.29024797	912	1176.706149	0.87306231	712	621.620364	Miss
523	-0.620079452	913	-566.1325397	0.25618347	713	182.658818	Hit
524	0.62322118	914	569.6241582	-0.3609327	714	-257.70591	Miss
525	-2.108779251	915	-1929.533015	-0.3245733	715	-232.06993	Miss

526	-1.542256338	916	-1412.706806	-0.2911818	716	-208.48618	Miss
527	-1.475769602	917	-1353.280725	1.80370034	717	1293.25314	Miss
528	1.076105549	918	987.864894	0.55620681	718	399.356488	Miss
529	0.251524407	919	231.1509298	0.58007343	719	417.072798	Miss
530	-0.82451723	920	-758.5558513	0.17747943	720	127.785187	Hit
531	-2.24643157	921	-2068.963476	-0.7237924	721	-521.85433	Miss
532	1.436440875	922	1324.398487	-1.7501785	722	-1263.6289	Miss
533	0.744841793	923	687.4889745	0.3636528	723	262.920976	Miss
534	-0.97306191	924	-899.1092044	-0.2602234	724	-188.40178	Hit
535	0.987845831	925	913.7573934	0.63404021	725	459.679153	Miss
536	-1.0897454	926	-1009.10424	-0.0567645	726	-41.211029	Hit
537	0.188672727	927	174.8996177	-0.0630144	727	-45.811436	Hit
538	1.277747441	928	1185.749625	-0.6526127	728	-475.10201	Miss
539	0.512594744	929	476.2005168	0.72252687	729	526.722092	Miss
540	-0.54096547	930	-503.0978874	-2.0756888	730	-1515.2528	Miss
541	-1.198693426	931	-1115.98358	-0.3122848	731	-228.28018	Miss
542	0.020045984	932	18.68285687	-0.9118322	732	-667.46119	Miss
543	-1.225688889	933	-1143.567734	-0.2923268	733	-214.27553	Miss
544	0.356224768	934	332.7139337	0.67269071	734	493.75498	Miss
545	0.055645797	935	52.02881976	3.08864293	735	2270.15256	Miss
546	-0.104146724	936	-97.48133358	0.96558687	736	710.671933	Miss
547	0.259349051	937	243.0100605	0.96518002	737	711.337678	Miss
548	1.074331379	938	1007.722834	-1.9209076	738	-1417.6298	Miss
549	-0.4336866	939	-407.2317171	-1.2175893	739	-899.79848	Miss
550	-1.199075463	940	-1127.130935	-0.8781335	740	-649.81881	Miss
551	0.75181472	941	707.4576518	1.68047859	741	1245.23463	Miss
552	-1.417831614	942	-1335.597381	-0.1166736	742	-86.571813	Miss
553	1.944501784	943	1833.665182	-1.0778203	743	-800.82046	Miss
554	-0.913629459	944	-862.4662093	-0.9844733	744	-732.4481	Miss
555	0.364669806	945	344.6129669	1.62063283	745	1207.37146	Miss
556	-0.465691396	946	-440.5440603	1.59992247	746	1193.54217	Miss
557	-1.004841919	947	-951.585297	0.23750937	747	177.419496	Hit
558	-0.609520341	948	-577.825283	-0.8985678	748	-672.12872	Miss
559	-1.29912792	949	-1232.872396	0.40678375	749	304.681031	Miss
560	-0.965852074	950	-917.5594706	-2.0738153	750	-1555.3615	Miss
561	-1.671023252	951	-1589.143113	0.23569904	751	177.009982	Miss
562	-0.109296221	952	-104.0500026	-0.0865407	752	-65.078614	Hit
563	-0.40028139	953	-381.4681648	-0.2863832	753	-215.64657	Miss
564	-0.200286546	954	-191.0733646	-0.4790259	754	-361.18552	Miss
565	1.24739116	955	1191.258558	0.81235582	755	613.328641	Miss
566	0.461129894	956	440.8401789	1.22746708	756	927.965109	Miss
567	0.040824209	957	39.06876798	-0.8677025	757	-656.85076	Miss
568	0.868248458	958	831.7820229	-0.1820007	758	-137.95652	Hit
569	2.464332896	959	2363.295247	-0.7348117	759	-557.72212	Miss

570	-1.803536873	960	-1731.395398	0.11358215	760	86.3224327	Miss
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