

L1	DAMAGE DETERMINATION									
	Warships 1880 to 1905									

ROLL	1	2/8	3/9	4	5	6	7	G	F	T
	DECK	TURRET	SUPERST	CON	BELT M	BELT E	BARBETTE	GENERAL	FIRES	TORPEDO
01-02	100	100	104	107	100	120	100	*601	501	100
03-04	100	100	104	107	101	121	100	*601	501	100
05-06	100	100	104	107	102	121	101	*602	501	101
07-08	101	101	107	108	106	123	101	*602	501	102
09-10	101	101	107	108	116	123	101	603	502	112
11-12	101	101	107	112	116	125	102	603	502	112
13-14	104	101	108	112	117	125	102	603	502	117
15-16	104	103	108	112	117	126	102	603	502	117
17-18	104	103	108	124	117	126	102	*604	503	120
19-20	106	103	113	124	118	127	103	*604	503	121
21-22	106	103	113	124	118	130	103	*604	503	122
23-24	110	104	124	133	118	133	103	*604	503	123
25-26	110	104	124	133	120	134	103	*604	506	123
27-28	110	104	127	140	120	134	105	605	506	123
29-30	113	105	127	140	120	134	105	605	506	123
31-32	113	105	128	140	121	135	105	605	506	125
33-34	114	106	128	140	123	135	107	*606	507	125
35-36	114	106	129	141	123	135	108	*606	507	126
37-38	116	107	129	141	123	147	109	*606	507	126
39-40	116	108	129	143	123	149	109	607	507	126
41-42	116	109	130	143	123	151	109	607	507	126
43-44	117	109	130	143	124	151	110	607	508	133
45-46	117	109	132	143	125	152	110	608	508	133
47-48	117	110	132	144	125	154	110	608	509	134
49-50	118	110	140	144	125	154	111	608	509	134
51-52	118	110	140	144	126	154	111	608	509	135
53-54	118	110	141	145	126	155	112	*609	510	135
55-56	120	111	141	145	126	155	112	*609	510	147
57-58	120	111	143	145	126	157	114	*609	510	152
59-60	120	111	143	146	146	167	114	*609	511	152
61-62	121	111	143	146	150	167	114	610	511	154
63-64	121	112	144	147	151	168	115	610	511	167
65-66	125	112	145	147	152	168	115	610	512	167
67-68	125	113	145	147	152	169	115	611	512	168
69-70	125	113	148	153	154	169	115	611	513	168
71-72	125	113	148	153	156	170	146	612	513	169
73-74	127	114	148	153	167	171	146	612	514	169
75-76	128	114	155	156	168	171	147	612	514	170
77-78	130	115	155	156	168	171	147	612	514	171
79-80	133	115	156	156	169	172	149	*613	515	172
81-82	133	115	156	157	170	172	149	*613	515	173
83-84	146	115	157	158	172	173	153	614	515	173
85-86	149	132	158	158	172	173	153	614	516	176
87-88	150	147	158	159	173	173	170	*615	516	176
89-90	152	147	159	160	176	175	170	*615	516	181
91-92	152	149	160	160	177	180	170	616	516	181
93-94	153	149	160	160	179	180	176	616	517	182
95-96	153	160	163	163	180	182	176	617	517	182
97-98	166	176	166	163	182	183	182	617	517	182
99-00	174	176	178	176	183	183	182	617	517	183

Proceed to **CHART M1** for description of damage.

L2	DAMAGE DETERMINATION									
	Warships 1906 to 1922									

ROLL	1	2/8	3/9	4	5	6	7	G	F	T
	DECK	TURRET	SUPERST	CON	BELT M	BELT E	BARBETTE	GENERAL	FIRES	TORPEDO
01-02	100	100	104	107	100	119	100	*601	501	100
03-04	100	100	104	108	101	120	100	*601	501	101
05-06	101	100	104	112	102	121	101	*601	501	102
07-08	101	101	107	112	106	121	101	*602	502	102
09-10	104	101	107	112	116	122	101	*602	502	112
11-12	104	101	108	124	116	123	102	*602	502	112
13-14	104	103	113	124	117	123	102	603	502	117
15-16	106	103	113	124	117	125	102	603	503	117
17-18	106	103	124	133	123	125	102	603	503	120
19-20	110	103	124	133	118	126	103	*604	503	121
21-22	110	104	127	140	118	126	103	*604	506	122
23-24	110	104	127	140	118	127	103	*604	506	123
25-26	113	104	128	140	119	130	103	605	506	123
27-28	113	105	128	140	120	133	105	605	506	123
29-30	114	105	129	141	120	134	105	605	507	123
31-32	114	106	129	141	121	134	105	*606	507	125
33-34	116	106	130	142	122	134	107	*606	507	125
35-36	116	107	130	143	123	135	109	*606	507	126
37-38	116	109	132	143	123	135	109	607	507	126
39-40	117	109	132	143	123	135	109	607	507	126
41-42	117	109	140	143	123	147	110	607	508	126
43-44	117	110	140	144	124	149	110	608	508	133
45-46	118	110	141	144	125	151	110	608	508	133
47-48	118	110	141	144	125	151	111	608	509	134
49-50	119	110	142	145	125	154	111	608	509	134
51-52	120	111	143	145	126	154	112	*609	509	135
53-54	120	111	143	145	126	154	112	*609	509	135
55-56	121	111	143	146	126	155	114	*609	510	147
57-58	121	111	144	146	146	155	114	*609	510	152
59-60	122	112	145	147	150	157	114	610	510	152
61-62	125	112	145	147	151	167	115	610	511	154
63-64	125	113	148	147	152	168	115	610	511	167
65-66	125	113	148	153	152	168	115	610	511	167
67-68	125	113	148	153	154	169	115	611	512	168
69-70	127	114	155	153	156	169	146	611	512	168
71-72	128	114	155	156	162	170	146	612	513	169
73-74	130	115	156	156	167	171	147	612	513	169
75-76	133	115	156	156	168	171	147	612	514	170
77-78	133	115	157	157	168	171	149	612	514	171
79-80	146	115	157	157	169	172	149	*613	514	172
81-82	149	132	158	158	170	172	153	*613	515	173
83-84	150	147	158	158	172	173	153	*613	515	173
85-86	152	147	159	159	172	173	162	614	515	176
87-88	152	149	159	160	173	173	170	614	516	176
89-90	153	149	160	160	176	175	170	*615	516	181
91-92	153	160	160	160	177	180	170	*615	516	181
93-94	161	160	161	162	179	180	176	616	517	182
95-96	162	161	163	163	180	182	176	617	517	182
97-98	166	176	166	163	182	183	182	617	517	182
99-00	174	176	178	176	126	183	182	617	517	183

Proceed to **CHART M1** for description of damage.

L3	DAMAGE DETERMINATION									
	Warships 1923 to 1945									

ROLL	1	2/8	3/9	4	5	6	7	G	F	T
	DECK	TURRET	SUPERST	CON	BELT M	BELT E	BARBETTE	GENERAL	FIRES	TORPEDO
01-02	100	100	104	112	100	119	100	*601	501	100
03-04	100	100	104	112	101	119	100	*601	501	101
05-06	101	101	113	124	102	120	101	*601	501	102
07-08	101	101	113	124	106	121	101	*602	502	102
09-10	104	101	124	124	116	121	101	*602	502	112
11-12	104	103	124	133	116	122	102	*602	502	112
13-14	104	103	127	140	117	123	102	603	503	117
15-16	106	103	127	140	117	123	102	603	503	117
17-18	106	103	128	140	123	125	102	603	504	120
19-20	110	104	129	141	118	125	103	*604	504	121
21-22	110	104	130	141	118	126	103	*604	504	122
23-24	113	104	130	142	119	126	103	*604	505	123
25-26	114	105	131	142	120	127	103	605	505	123
27-28	116	105	131	143	120	130	105	605	505	123
29-30	116	106	132	143	121	131	105	605	506	125
31-32	116	106	132	143	122	133	105	*606	506	125
33-34	117	109	137	143	123	134	105	*606	506	126
35-36	117	109	138	144	123	134	109	*606	507	126
37-38	117	109	139	144	123	134	109	607	507	126
39-40	118	110	140	144	123	135	109	607	507	126
41-42	118	110	140	145	124	135	110	608	507	133
43-44	119	110	141	145	125	135	110	608	507	133
45-46	120	110	141	145	125	147	110	608	508	134
47-48	121	111	142	146	126	149	111	*609	508	134
49-50	122	111	143	146	126	151	111	*609	508	135
51-52	125	111	143	147	126	151	112	*609	509	135
53-54	125	111	143	147	146	151	112	*609	509	147
55-56	125	112	144	153	150	154	114	610	509	152
57-58	125	112	145	153	151	154	114	610	509	152
59-60	127	113	145	156	152	154	114	610	510	152
61-62	128	113	148	156	152	155	115	611	510	154
63-64	130	113	148	156	154	155	115	611	510	167
65-66	131	114	155	157	156	157	115	611	511	167
67-68	133	114	156	157	162	167	115	612	511	168
69-70	133	115	156	158	162	168	146	612	511	168
71-72	136	115	157	158	167	168	146	612	512	169
73-74	137	115	157	159	168	169	147	*613	512	169
75-76	138	115	158	159	168	169	147	*613	512	170
77-78	139	132	158	160	169	170	149	*613	513	171
79-80	146	132	159	160	170	171	149	614	513	172
81-82	149	147	159	160	172	171	153	614	514	173
83-84	150	147	160	162	172	171	153	614	514	173
85-86	152	149	161	163	173	172	162	*615	514	176
87-88	152	149	163	164	176	173	162	*615	515	176
89-90	153	160	164	164	177	173	170	*615	515	181
91-92	153	160	164	164	179	175	170	616	516	181
93-94	161	161	165	165	180	180	176	617	516	182
95-96	162	161	165	165	182	180	176	617	517	182
97-98	166	176	166	165	183	182	182	617	517	182
99-00	174	176	178	176	126	183	182	617	517	183

Proceed to **CHART M1** for description of damage.

L4	DAMAGE DETERMINATION									
	Aircraft carriers and like warships 1915-1945									

ROLL	1	4	5	6	7	9	G	F	T
	FLIGHT DECK	CON	BELT M	BELT E	HANGAR	SUPERST	GENERAL	FIRES	TORPEDO
01-04	100	165	100	119	100	103	*601	501	100
05-08	103	124	154	120	185	113	*602	501	116
09-12	104	124	116	121	186	124	603	502	120
13-16	104	140	117	123	188	104	603	503	121
17-20	184	140	117	125	185	128	611	504	122
21-24	110	141	118	126	103	129	605	504	123
25-28	114	142	120	124	186	132	605	505	123
29-32	116	143	121	147	188	132	617	506	123
33-36	117	143	123	134	118	143	607	506	126
37-40	117	144	123	134	188	142	608	507	126
41-44	118	145	125	135	110	140	607	507	126
45-47	120	145	125	147	125	141	610	100	147
49-52	122	146	126	151	118	143	*604	100	152
53-56	125	147	146	151	186	144	*601	509	152
57-60	125	153	151	154	114	145	612	509	167
61-64	128	156	152	155	188	147	*613	510	168
65-68	185	157	155	155	154	155	614	511	169
69-72	133	158	174	168	146	155	*615	511	171
73-76	138	159	168	169	147	144	*615	512	171
77-80	151	160	169	170	149	140	603	513	172
81-84	149	161	172	171	153	143	616	514	173
85-88	152	164	173	172	155	164	611	514	176
89-92	153	164	177	173	165	164	*609	515	180
93-96	184	165	180	180	176	165	*606	516	182
97-00	166	165	183	182	182	165	*604	517	185

Proceed to **CHART M1** for description of damage.

L5	DAMAGE DETERMINATION	
	Submarines, MTB, and small vessels	

ROLL	SUBMARINES	MTB / SMALL CRAFT
01-05	700	800
06-10	701	801
11-15	702	802
16-20	703	803
21-25	704	804
26-30	705	805
31-35	706	806
36-40	707	807
41-45	708	808
46-50	709	809
51-55	710	810
56-60	708	811
61-65	707	812
66-70	706	813
71-75	710	812
76-80	704	811
81-85	703	809
86-90	702	807
91-95	701	802
96-00	700	801

Proceed to **CHART M1** for description of damage.

T4 TORPEDO DUD CHECK

COUNTRY	PERIOD	CONTACT PISTOL DUD ON ROLL OF	MAGNETIC PISTOL DUD ON ROLL OF
ALL	1880-1945 UNLESS OTHERWISE NOTED BELOW	01-15	Not Available
GREAT BRITAIN	1935 to 03/1944	01-15	01-35
GREAT BRITAIN	03/1944 to 1945	01-15	01-20
GERMANY	1935 to 11/1942	01-25	01-50
GERMANY	11/1942 to 1945	01-25	01-30
ITALY	1940 to 1942	01-15	NA
ITALY	1942 to 1943	01-15	01-20
JAPAN	07/1944 to 1945	01-15	01-20
RUSSIA	1942 to 1945	01-15	01-20
UNITED STATES	1935 to 09/1943	01-40	01-60
UNITED STATES	09/1943 to 1945	01-15	01-20

T5 TORPEDO DAMAGE TABLE

ROLL	TORPEDO DAMAGE CLASS																	
	A		B		C		D		E		F		G		H		I	
	CON	MAG	CON	MAG	CON	MAG	CON	MAG	CON	MAG	CON	MAG	CON	MAG	CON	MAG	CON	MAG
01-08	1650	2250	1485	2025	1320	1800	1155	1575	1005	1365	855	1170	727	990	640	792	590	
09-15	1485	2025	1337	1823	1188	1620	1040	1418	904	1229	770	1053	654	891	575	713	525	
16-23	1375	1875	1238	1688	1100	1500	963	1313	837	1138	713	975	606	825	533	660	485	
24-33	1265	1725	1139	1553	1012	1380	886	1208	770	1047	656	897	557	759	490	607	445	
34-43	1210	1650	1089	1485	968	1320	847	1155	737	1001	627	858	533	726	468	581	425	
44-55	1155	1575	1040	1418	924	1260	809	1103	703	956	599	819	509	693	448	554	405	
56-65	1100	1500	990	1350	880	1200	770	1050	670	910	570	780	485	660	427	528	390	
66-75	1045	1425	941	1283	836	1140	732	998	636	865	542	741	460	627	405	502	370	
76-83	990	1350	891	1215	792	1080	693	945	603	819	513	702	436	594	384	475	350	
84-92	935	1275	842	1148	748	1020	655	893	569	774	485	663	412	561	362	449	330	
93-00	825	1125	743	1013	660	900	578	788	502	683	428	585	363	495	320	396	295	

ARMOR ADJUSTMENT																	
ROLL	ARMOR VALUE																
01-45	USE ARMOR VALUE 5V MAIN BELT																
46-75	USE ARMOR VALUE 6V BELT ENDS																
76-00	USE 0 (NO ARMOR)																

Up to 1.4	1.5 to 2.5	2.6 to 3.5	3.6 to 4.5	4.6 to 5.5	5.6 to 6.5	6.6 to 8.0	8.1 to 9.5	9.6 to 11.0	11.1 to 12.5	12.6 to 14.0	Over 14.0
25	50	75	100	125	150	200	250	300	350	400	450
Subtract the number listed above from the DP caused by this hit according to the armor (5V or 6V) of the target ship.											

T6 TORPEDOES – CALCULATED MOVEMENT FOR GAME TURNS

TORPEDO SPEED (KTS)	1 GAME TURN		2 GAME TURNS		3 GAME TURNS		4 GAME TURNS		5 GAME TURNS		6 GAME TURNS		7 GAME TURNS		8 GAME TURNS		9 GAME TURNS		10 GAME TURNS		11 GAME TURNS		12 GAME TURNS	
	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds	In	Yds
1	0.1	68	0.3	135	0.4	203	0.5	270	0.7	338	0.8	405	0.9	473	1.1	541	1.2	608	1.4	676	1.5	743	1.6	811
6	0.8	405	1.6	811	2.4	1,216	3.2	1,622	4.1	2,027	4.9	2,432	5.7	2,838	6.5	3,243	7.3	3,649	8.1	4,054	8.9	4,459	9.7	4,865
7	0.9	473	1.9	946	2.8	1,419	3.8	1,892	4.7	2,365	5.7	2,838	6.6	3,311	7.6	3,784	8.5	4,257	9.5	4,730	10.4	5,203	11.4	5,676
8	1.1	541	2.2	1,081	3.2	1,622	4.3	2,162	5.4	2,703	6.5	3,243	7.6	3,784	8.6	4,324	9.7	4,865	10.8	5,405	11.9	5,946	13.0	6,486
9	1.2	608	2.4	1,216	3.6	1,824	4.9	2,432	6.1	3,041	7.3	3,649	8.5	4,257	9.7	4,865	10.9	5,473	12.2	6,081	13.4	6,689	14.6	7,297
10	1.4	676	2.7	1,351	4.1	2,027	5.4	2,703	6.8	3,378	8.1	4,054	9.5	4,730	10.8	5,405	12.2	6,081	13.5	6,757	14.9	7,432	16.2	8,108
11	1.5	743	3.0	1,486	4.5	2,230	5.9	2,973	7.4	3,716	8.9	4,459	10.4	5,203	11.9	5,946	13.4	6,689	14.9	7,432	16.4	8,176	17.8	8,919
12	1.6	811	3.2	1,622	4.9	2,432	6.5	3,243	8.1	4,054	9.7	4,865	11.4	5,676	13.0	6,486	14.6	7,297	16.2	8,108	17.8	8,919	19.5	9,730
13	1.8	878	3.5	1,757	5.3	2,635	7.0	3,513	8.8	4,392	10.5	5,270	12.3	6,149	14.1	7,027	15.8	7,905	17.6	8,784	19.3	9,662	21.1	10,540
14	1.9	946	3.8	1,892	5.7	2,838	7.6	3,784	9.5	4,730	11.4	5,676	13.2	6,622	15.1	7,567	17.0	8,513	18.9	9,459	20.8	10,405	22.7	11,351
15	2.0	1,014	4.1	2,027	6.1	3,041	8.1	4,054	10.1	5,068	12.2	6,081	14.2	7,095	16.2	8,108	18.2	9,122	20.3	10,135	22.3	11,149	24.3	12,162
16	2.2	1,081	4.3	2,162	6.5	3,243	8.6	4,324	10.8	5,405	13.0	6,486	15.1	7,567	17.3	8,649	19.5	9,730	21.6	10,811	23.8	11,892	25.9	12,973
17	2.3	1,149	4.6	2,297	6.9	3,446	9.2	4,595	11.5	5,743	13.8	6,892	16.1	8,040	18.4	9,189	20.7	10,338	23.0	11,486	25.3	12,635	27.6	13,784
18	2.4	1,216	4.9	2,432	7.3	3,649	9.7	4,865	12.2	6,081	14.6	7,297	17.0	8,513	19.5	9,730	21.9	10,946	24.3	12,162	26.8	13,378	29.2	14,594
19	2.6	1,284	5.1	2,568	7.7	3,851	10.3	5,135	12.8	6,419	15.4	7,703	18.0	8,986	20.5	10,270	23.1	11,554	25.7	12,838	28.2	14,121	30.8	15,405
20	2.7	1,351	5.4	2,703	8.1	4,054	10.8	5,405	13.5	6,757	16.2	8,108	18.9	9,459	21.6	10,811	24.3	12,162	27.0	13,513	29.7	14,865	32.4	16,216
21	2.8	1,419	5.7	2,838	8.5	4,257	11.4	5,676	14.2	7,095	17.0	8,513	19.9	9,932	22.7	11,351	25.5	12,770	28.4	14,189	31.2	15,608	34.1	17,027
22	3.0	1,486	5.9	2,973	8.9	4,459	11.9	5,946	14.9	7,432	17.8	8,919	20.8	10,405	23.8	11,892	26.8	13,378	29.7	14,865	32.7	16,351	35.7	17,838
23	3.1	1,554	6.2	3,108	9.3	4,662	12.4	6,216	15.5	7,770	18.6	9,324	21.8	10,878	24.9	12,432	28.0	13,966	31.1	15,540	34.2	17,094	37.3	18,648
24	3.2	1,622	6.5	3,243	9.7	4,865	13.0	6,486	16.2	8,108	19.5	9,730	22.7	11,351	25.9	12,973	29.2	14,594	32.4	16,216	35.7	17,838	38.9	19,459
25	3.4	1,689	6.8	3,378	10.1	5,068	13.5	6,757	16.9	8,446	20.3	10,135	23.6	11,824	27.0	13,513	30.4	15,203	33.8	16,892	37.2	18,581	40.5	20,270
26	3.5	1,757	7.0	3,513	10.5	5,270	14.1	7,027	17.6	8,784	21.1	10,540	24.6	12,297	28.1	14,054	31.6	15,811	35.1	17,567	38.6	19,324	42.2	21,081
27	3.6	1,824	7.3	3,649	10.9	5,473	14.6	7,297	18.2	9,122	21.9	10,946	25.5	12,770	29.2	14,594	32.8	16,419	36.5	18,243	40.1	20,067	43.8	21,892
28	3.8	1,892	7.6	3,784	11.4	5,676	15.1	7,567	18.9	9,459	22.7	11,351	26.5	13,243	30.3	15,135	34.1	17,027	37.8	18,919	41.6	20,811	45.4	22,702
29	3.9	1,959	7.8	3,919	11.8	5,878	15.7	7,838	19.6	9,797	23.5	11,757	27.4	13,716	31.4	15,675	35.3	17,635	39.2	19,594	43.1	21,554	47.0	23,513
30	4.1	2,027	8.1	4,054	12.2	6,081	16.2	8,108	20.3	10,135	24.3	12,162	28.4	14,189	32.4	16,216	36.5	18,243	40.5	20,270	44.6	22,297	48.6	24,324
31	4.2	2,095	8.4	4,189	12.6	6,284	16.8	8,378	20.9	10,473	25.1	12,567	29.3	14,662	33.5	16,757	37.7	18,851	41.9	20,946	46.1	23,040	50.3	25,135
32	4.3	2,162	8.6	4,324	13.0	6,486	17.3	8,649	21.6	10,811	25.9	12,973	30.3	15,135	34.6	17,297	38.9	19,459	43.2	21,621	47.6	23,783	51.9	25,946
33	4.5	2,230	8.9	4,459	13.4	6,689	17.8	8,919	22.3	11,149	26.8	13,378	31.2	15,608	35.7	17,838	40.1	20,067	44.6	22,297	49.1	24,527	53.5	26,756
34	4.6	2,297	9.2	4,595	13.8	6,892	18.4	9,189	23.0	11,486	27.6	13,784	32.2	16,081	36.8	18,378	41.4	20,675	45.9	22,973	50.5	25,270	55.1	27,567
35	4.7	2,365	9.5	4,730	14.2	7,095	18.9	9,459	23.6	11,824	28.4	14,189	33.1	16,554	37.8	18,919	42.6	21,284	47.3	23,648	52.0	26,013	56.8	28,378
36	4.9	2,432	9.7	4,865	14.6	7,297	19.5	9,730	24.3	12,162	29.2	14,594	34.1	17,027	38.9	19,459	43.8	21,892	48.6	24,324	53.5	26,756	58.4	29,189
37	5.0	2,500	10.0	5,000	15.0	7,500	20.0	10,000	25.0	12,500	30.0	15,000	35.0	17,500	40.0	20,000	45.0	22,500	50.0	25,000	55.0	27,500	60.0	30,000
38	5.1	2,568	10.3	5,135	15.4	7,703	20.5	10,270	25.7	12,838	30.8	15,405	35.9	17,973	41.1	20,540	46.2	23,108	51.4	25,675	56.5	28,243	61.6	30,810
39	5.3	2,635	10.5	5,270	15.8	7,905	21.1	10,540	26.4	13,176	31.6	15,811	36.9	18,446	42.2	21,081	47.4	23,716	52.7	26,351	58.0	28,986	63.2	31,621
40	5.4	2,703	10.8	5,405	16.2	8,108	21.6	10,811	27.0	13,513	32.4	16,216	37.8	18,919	43.2	21,621	48.6	24,324	54.1	27,027	59.5	29,729	64.9	32,432
41	5.5	2,770	11.1	5,540	16.6	8,311	22.2	11,081	27.7	13,851	33.2	16,621	38.8	19,392	44.3	22,162	49.9	24,932	55.4	27,702	60.9	30,473	66.5	33,243
42	5.7	2,838	11.4	5,676	17.0	8,513	22.7	11,351	28.4	14,189	34.1	17,027	39.7	19,865	45.4	22,702	51.1	25,540	56.8	28,378	62.4	31,216	68.1	34,054
43	5.8	2,905	11.6	5,811	17.4	8,716	23.2	11,621	29.1	14,527	34.9	17,432	40.7	20,338	46.5	23,243	52.3	26,148	58.1	29,054	63.9	31,959	69.7	34,864
44	5.9	2,973	11.9	5,946	17.8	8,919	23.8	11,892	29.7	14,865	35.7	17,838	41.6	20,811	47.6	23,783	53.5	26,756	59.5	29,729	65.4	32,702	71.4	35,675
45	6.1	3,041	12.2	6,081	18.2	9,122	24.3	12,162	30.4	15,203	36.5	18,243	42.6	21,284	48.6	24,324	54.7	27,365	60.8	30,405	66.9	33,446	73.0	36,486
46	6.2	3,108	12.4	6,216	18.6	9,324	24.9	12,432	31.1	15,540	37.3	18,648	43.5	21,756	49.7	24,865	55.9	27,973	62.2	31,081	68.4	34,189	74.6	37,297
47	6.4	3,176	12.7	6,351	19.1	9,527	25.4	12,703	31.8	15,878	38.1	19,054	44.5	22,229	50.8	25,405	57.2	28,581	63.5	31,756	69.9	34,932	76.2	38,108
48	6.5	3,243	13.0	6,486	19.5	9,730	25.9	12,973	32.4	16,216	38.9	19,459	45.4	22,702	51.9	25,946	58.4	29,189	64.9	32,432	71.4	35,675	77.8	38,918
49	6.6	3,311	13.2	6,622	19.9	9,932	26.5	13,243	33.1	16,554	39.7	19,865	46.4	23,175	53.0	26,486	59.6	29,797	66.2	33,108	72.8	36,418	79.5	39,729
50	6.8	3,378	13.5	6,757	20.3	10,135	27.0	13,513	33.8	16,892	40.5	20,270	47.3	23,648	54.1	27,027	60.8	30,405	67.6	33,783	74.3	37,162	81.1	40,540