

Quantile der Chi-Quadrat-Verteilung mit n Freiheitsgraden

n	Ordnung/Alpha									
	0,005	0,01	0,025	0,05	0,1	0,9	0,95	0,975	0,99	0,995
1	0,00004	0,00016	0,00098	0,00393	0,0158	2,706	3,841	5,024	6,635	7,879
2	0,0100	0,0201	0,0506	0,1026	0,2107	4,605	5,991	7,378	9,210	10,60
3	0,0717	0,1148	0,2158	0,3518	0,5844	6,251	7,815	9,348	11,34	12,84
4	0,2070	0,2971	0,4844	0,7107	1,064	7,779	9,488	11,14	13,28	14,86
5	0,4117	0,5543	0,8312	1,145	1,610	9,236	11,07	12,83	15,09	16,75
6	0,6757	0,8721	1,237	1,6354	2,204	10,64	12,59	14,45	16,81	18,55
7	0,9893	1,239	1,690	2,1673	2,833	12,02	14,07	16,01	18,48	20,28
8	1,344	1,646	2,180	2,7326	3,490	13,36	15,51	17,53	20,09	21,95
9	1,735	2,088	2,700	3,3251	4,168	14,68	16,92	19,02	21,67	23,59
10	2,156	2,558	3,247	3,9403	4,865	15,99	18,31	20,48	23,21	25,19
11	2,603	3,053	3,816	4,5748	5,578	17,28	19,68	21,92	24,72	26,76
12	3,074	3,571	4,404	5,2260	6,304	18,55	21,03	23,34	26,22	28,30
13	3,565	4,107	5,009	5,8919	7,042	19,81	22,36	24,74	27,69	29,82
14	4,075	4,660	5,629	6,5706	7,790	21,06	23,68	26,12	29,14	31,32
15	4,601	5,229	6,262	7,2609	8,547	22,31	25,00	27,49	30,58	32,80
16	5,142	5,812	6,908	7,9616	9,312	23,54	26,30	28,85	32,00	34,27
17	5,697	6,408	7,564	8,6718	10,09	24,77	27,59	30,19	33,41	35,72
18	6,265	7,015	8,231	9,3905	10,86	25,99	28,87	31,53	34,81	37,16
19	6,844	7,633	8,907	10,12	11,65	27,20	30,14	32,85	36,19	38,58
20	7,434	8,260	9,591	10,85	12,44	28,41	31,41	34,17	37,57	40,00
21	8,034	8,897	10,28	11,59	13,24	29,62	32,67	35,48	38,93	41,40
22	8,643	9,542	10,98	12,34	14,04	30,81	33,92	36,78	40,29	42,80
23	9,260	10,20	11,69	13,09	14,85	32,01	35,17	38,08	41,64	44,18
24	9,886	10,86	12,40	13,85	15,66	33,20	36,42	39,36	42,98	45,56
25	10,52	11,52	13,12	14,61	16,47	34,38	37,65	40,65	44,31	46,93
26	11,16	12,20	13,84	15,38	17,29	35,56	38,89	41,92	45,64	48,29
27	11,81	12,88	14,57	16,15	18,11	36,74	40,11	43,19	46,96	49,64
28	12,46	13,56	15,31	16,93	18,94	37,92	41,34	44,46	48,28	50,99
29	13,12	14,26	16,05	17,71	19,77	39,09	42,56	45,72	49,59	52,34
30	13,79	14,95	16,79	18,49	20,60	40,26	43,77	46,98	50,89	53,67
31	14,46	15,66	17,54	19,28	21,43	41,42	44,99	48,23	52,19	55,00
32	15,13	16,36	18,29	20,07	22,27	42,58	46,19	49,48	53,49	56,33
33	15,82	17,07	19,05	20,87	23,11	43,75	47,40	50,73	54,78	57,65
34	16,50	17,79	19,81	21,66	23,95	44,90	48,60	51,97	56,06	58,96
35	17,19	18,51	20,57	22,47	24,80	46,06	49,80	53,20	57,34	60,27
36	17,89	19,23	21,34	23,27	25,64	47,21	51,00	54,44	58,62	61,58
37	18,59	19,96	22,11	24,07	26,49	48,36	52,19	55,67	59,89	62,88
38	19,29	20,69	22,88	24,88	27,34	49,51	53,38	56,90	61,16	64,18
39	20,00	21,43	23,65	25,70	28,20	50,66	54,57	58,12	62,43	65,48
40	20,71	22,16	24,43	26,51	29,05	51,81	55,76	59,34	63,69	66,77
45	24,31	25,90	28,37	30,61	33,35	57,51	61,66	65,41	69,96	73,17
50	27,99	29,71	32,36	34,76	37,69	63,17	67,50	71,42	76,15	79,49
60	35,53	37,48	40,48	43,19	46,46	74,40	79,08	83,30	88,38	91,95
70	43,28	45,44	48,76	51,74	55,33	85,53	90,53	95,02	100,4	104,2
80	51,17	53,54	57,15	60,39	64,28	96,58	101,9	106,6	112,3	116,3
90	59,20	61,75	65,65	69,13	73,29	107,6	113,1	118,1	124,1	128,3
100	67,33	70,06	74,22	77,93	82,36	118,5	124,3	129,6	135,8	140,2
120	83,85	86,92	91,57	95,70	100,6	140,2	146,6	152,2	159,0	163,6
150	109,1	112,7	118,0	122,7	128,3	172,6	179,6	185,8	193,2	198,4
200	152,2	156,4	162,7	168,3	174,8	226,0	234,0	241,1	249,4	255,3

Quantile der Student-t-Verteilung

n	Ordnung/Alpha				
	0,9	0,95	0,975	0,99	0,995
1	3,078	6,314	12,71	31,82	63,66
2	1,886	2,920	4,303	6,965	9,925
3	1,638	2,353	3,182	4,541	5,841
4	1,533	2,132	2,776	3,747	4,604
5	1,476	2,015	2,571	3,365	4,032
6	1,440	1,943	2,447	3,143	3,707
7	1,415	1,895	2,365	2,998	3,499
8	1,397	1,860	2,306	2,896	3,355
9	1,383	1,833	2,262	2,821	3,250
10	1,372	1,812	2,228	2,764	3,169
11	1,363	1,796	2,201	2,718	3,106
12	1,356	1,782	2,179	2,681	3,055
13	1,350	1,771	2,160	2,650	3,012
14	1,345	1,761	2,145	2,624	2,977
15	1,341	1,753	2,131	2,602	2,947
16	1,337	1,746	2,120	2,583	2,921
17	1,333	1,740	2,110	2,567	2,898
18	1,330	1,734	2,101	2,552	2,878
19	1,328	1,729	2,093	2,539	2,861
20	1,325	1,725	2,086	2,528	2,845
21	1,323	1,721	2,080	2,518	2,831
22	1,321	1,717	2,074	2,508	2,819
23	1,319	1,714	2,069	2,500	2,807
24	1,318	1,711	2,064	2,492	2,797
25	1,316	1,708	2,060	2,485	2,787
26	1,315	1,706	2,056	2,479	2,779
27	1,314	1,703	2,052	2,473	2,771
28	1,313	1,701	2,048	2,467	2,763
29	1,311	1,699	2,045	2,462	2,756
30	1,310	1,697	2,042	2,457	2,750
31	1,309	1,696	2,040	2,453	2,744
32	1,309	1,694	2,037	2,449	2,738
33	1,308	1,692	2,035	2,445	2,733
34	1,307	1,691	2,032	2,441	2,728
35	1,306	1,690	2,030	2,438	2,724
36	1,306	1,688	2,028	2,434	2,719
37	1,305	1,687	2,026	2,431	2,715
38	1,304	1,686	2,024	2,429	2,712
39	1,304	1,685	2,023	2,426	2,708
40	1,303	1,684	2,021	2,423	2,704
45	1,301	1,679	2,014	2,412	2,690
50	1,299	1,676	2,009	2,403	2,678
60	1,296	1,671	2,000	2,390	2,660
70	1,294	1,667	1,994	2,381	2,648
80	1,292	1,664	1,990	2,374	2,639
90	1,291	1,662	1,987	2,368	2,632
100	1,290	1,660	1,984	2,364	2,626
120	1,289	1,658	1,980	2,358	2,617
150	1,287	1,655	1,976	2,351	2,609
200	1,286	1,653	1,972	2,345	2,601
300	1,284	1,650	1,968	2,339	2,592
400	1,284	1,649	1,966	2,336	2,588
500	1,283	1,648	1,965	2,334	2,586

Quantile der Standard-Normalverteilung

Ordnung	Quantil
0,9	1,2816
0,95	1,6449
0,975	1,9600
0,98	2,0537
0,99	2,3263
0,995	2,5758
0,999	3,0902

Quantile der F-Verteilung mit (n_1, n_2) -Freiheitsgraden zur Ordnung 0.99

n_2	n_1																				
	1	2	3	4	5	6	7	8	9	10	12	14	15	20	24	30	40	50	60	80	120
1	4052	5000	5403	5625	5764	5859	5928	5981	6022	6056	6106	6143	6157	6209	6235	6261	6287	6303	6313	6326	6339
2	98,50	99,00	99,17	99,25	99,30	99,33	99,36	99,37	99,39	99,40	99,42	99,43	99,43	99,45	99,46	99,47	99,47	99,48	99,48	99,49	99,49
3	34,12	30,82	29,46	28,71	28,24	27,91	27,67	27,49	27,35	27,23	27,05	26,92	26,87	26,69	26,60	26,50	26,41	26,35	26,32	26,27	26,22
4	21,20	18,00	16,69	15,98	15,52	15,21	14,98	14,80	14,66	14,55	14,37	14,25	14,20	14,02	13,93	13,84	13,75	13,69	13,65	13,61	13,56
5	16,26	13,27	12,06	11,39	10,97	10,67	10,46	10,29	10,16	10,05	9,888	9,770	9,722	9,553	9,466	9,379	9,291	9,238	9,202	9,157	9,112
6	13,75	10,92	9,780	9,148	8,746	8,466	8,260	8,102	7,976	7,874	7,718	7,605	7,559	7,396	7,313	7,229	7,143	7,091	7,057	7,013	6,969
7	12,25	9,547	8,451	7,847	7,460	7,191	6,993	6,840	6,719	6,620	6,469	6,359	6,314	6,155	6,074	5,992	5,908	5,858	5,824	5,781	5,737
8	11,26	8,649	7,591	7,006	6,632	6,371	6,178	6,029	5,911	5,814	5,667	5,559	5,515	5,359	5,279	5,198	5,116	5,065	5,032	4,989	4,946
9	10,56	8,022	6,992	6,422	6,057	5,802	5,613	5,467	5,351	5,257	5,111	5,005	4,962	4,808	4,729	4,649	4,567	4,517	4,483	4,441	4,398
10	10,04	7,559	6,552	5,994	5,636	5,386	5,200	5,057	4,942	4,849	4,706	4,601	4,558	4,405	4,327	4,247	4,165	4,115	4,082	4,039	3,996
11	9,646	7,206	6,217	5,668	5,316	5,069	4,886	4,744	4,632	4,539	4,397	4,293	4,251	4,099	4,021	3,941	3,860	3,810	3,776	3,734	3,690
12	9,330	6,927	5,953	5,412	5,064	4,821	4,640	4,499	4,388	4,296	4,155	4,052	4,010	3,858	3,780	3,701	3,619	3,569	3,535	3,493	3,449
13	9,074	6,701	5,739	5,205	4,862	4,620	4,441	4,302	4,191	4,100	3,960	3,857	3,815	3,665	3,587	3,507	3,425	3,375	3,341	3,298	3,255
14	8,862	6,515	5,564	5,035	4,695	4,456	4,278	4,140	4,030	3,939	3,800	3,698	3,656	3,505	3,427	3,348	3,266	3,215	3,181	3,138	3,094
15	8,683	6,359	5,417	4,893	4,556	4,318	4,142	4,004	3,895	3,805	3,666	3,564	3,522	3,372	3,294	3,214	3,132	3,081	3,047	3,004	2,959
16	8,531	6,226	5,292	4,773	4,437	4,202	4,026	3,890	3,780	3,691	3,553	3,451	3,409	3,259	3,181	3,101	3,018	2,967	2,933	2,889	2,845
17	8,400	6,112	5,185	4,669	4,336	4,102	3,927	3,791	3,682	3,593	3,455	3,353	3,312	3,162	3,084	3,003	2,920	2,869	2,835	2,791	2,746
18	8,285	6,013	5,092	4,579	4,248	4,015	3,841	3,705	3,597	3,508	3,371	3,269	3,227	3,077	2,999	2,919	2,835	2,784	2,749	2,705	2,660
19	8,185	5,926	5,010	4,500	4,171	3,939	3,765	3,631	3,523	3,434	3,297	3,195	3,153	3,003	2,925	2,844	2,761	2,709	2,674	2,630	2,584
20	8,096	5,849	4,938	4,431	4,103	3,871	3,699	3,564	3,457	3,368	3,231	3,130	3,088	2,938	2,859	2,778	2,695	2,643	2,608	2,563	2,517
21	8,017	5,780	4,874	4,369	4,042	3,812	3,640	3,506	3,398	3,310	3,173	3,072	3,030	2,880	2,801	2,720	2,636	2,584	2,548	2,503	2,457
22	7,945	5,719	4,817	4,313	3,988	3,758	3,587	3,453	3,346	3,258	3,121	3,019	2,978	2,827	2,749	2,667	2,583	2,531	2,495	2,450	2,403
23	7,881	5,664	4,765	4,264	3,939	3,710	3,539	3,406	3,299	3,211	3,074	2,973	2,931	2,781	2,702	2,620	2,535	2,483	2,447	2,401	2,354
24	7,823	5,614	4,718	4,218	3,895	3,667	3,496	3,363	3,256	3,168	3,032	2,930	2,889	2,738	2,659	2,577	2,492	2,440	2,403	2,357	2,310
25	7,770	5,568	4,675	4,177	3,855	3,627	3,457	3,324	3,217	3,129	2,993	2,892	2,850	2,699	2,620	2,538	2,453	2,400	2,364	2,317	2,270
26	7,721	5,526	4,637	4,140	3,818	3,591	3,421	3,288	3,182	3,094	2,958	2,857	2,815	2,664	2,585	2,503	2,417	2,364	2,327	2,281	2,233
27	7,677	5,488	4,601	4,106	3,785	3,558	3,388	3,256	3,149	3,062	2,926	2,824	2,783	2,632	2,552	2,470	2,384	2,330	2,294	2,247	2,198
28	7,636	5,453	4,568	4,074	3,754	3,528	3,358	3,226	3,120	3,032	2,896	2,795	2,753	2,602	2,522	2,440	2,354	2,300	2,263	2,216	2,167
29	7,598	5,420	4,538	4,045	3,725	3,499	3,330	3,198	3,092	3,005	2,868	2,767	2,726	2,574	2,495	2,412	2,325	2,271	2,234	2,187	2,138
30	7,562	5,390	4,510	4,018	3,699	3,473	3,304	3,173	3,067	2,979	2,843	2,742	2,700	2,549	2,469	2,386	2,299	2,245	2,208	2,160	2,111
40	7,314	5,179	4,313	3,828	3,514	3,291	3,124	2,993	2,888	2,801	2,665	2,563	2,522	2,369	2,288	2,203	2,114	2,058	2,019	1,969	1,917
50	7,171	5,057	4,199	3,720	3,408	3,186	3,020	2,890	2,785	2,698	2,562	2,461	2,419	2,265	2,183	2,098	2,007	1,949	1,909	1,857	1,803
60	7,077	4,977	4,126	3,649	3,339	3,119	2,953	2,823	2,718	2,632	2,496	2,394	2,352	2,198	2,115	2,028	1,936	1,877	1,836	1,783	1,726
80	6,963	4,881	4,036	3,563	3,255	3,036	2,871	2,742	2,637	2,551	2,415	2,313	2,271	2,115	2,032	1,944	1,849	1,788	1,746	1,690	1,630
100	6,895	4,824	3,984	3,513	3,206	2,988	2,823	2,694	2,590	2,503	2,368	2,265	2,223	2,067	1,983	1,893	1,797	1,735	1,692	1,634	1,572
120	6,851	4,787	3,949	3,480	3,174	2,956	2,792	2,663	2,559	2,472	2,336	2,234	2,192	2,035	1,950	1,860	1,763	1,700	1,656	1,597	1,533

Quantile der F-Verteilung mit (n_1, n_2) -Freiheitsgraden zur Ordnung 0.975

n_2	n_1																				
	1	2	3	4	5	6	7	8	9	10	12	14	15	20	24	30	40	50	60	80	120
1	647,8	799,5	864,2	899,6	921,8	937,1	948,2	956,7	963,3	968,6	976,7	982,5	984,9	993,1	997,2	1001,4	1005,6	1008,1	1009,8	1011,9	1014,0
2	38,51	39,00	39,17	39,25	39,30	39,33	39,36	39,37	39,39	39,40	39,41	39,43	39,43	39,45	39,46	39,46	39,47	39,48	39,48	39,49	39,49
3	17,44	16,04	15,44	15,10	14,88	14,73	14,62	14,54	14,47	14,42	14,34	14,28	14,25	14,17	14,12	14,08	14,04	14,01	13,99	13,97	13,95
4	12,22	10,65	9,979	9,605	9,364	9,197	9,074	8,980	8,905	8,844	8,751	8,684	8,657	8,560	8,511	8,461	8,411	8,381	8,360	8,335	8,309
5	10,01	8,434	7,764	7,388	7,146	6,978	6,853	6,757	6,681	6,619	6,525	6,456	6,428	6,329	6,278	6,227	6,175	6,144	6,123	6,096	6,069
6	8,813	7,260	6,599	6,227	5,988	5,820	5,695	5,600	5,523	5,461	5,366	5,297	5,269	5,168	5,117	5,065	5,012	4,980	4,959	4,932	4,904
7	8,073	6,542	5,890	5,523	5,285	5,119	4,995	4,899	4,823	4,761	4,666	4,596	4,568	4,467	4,415	4,362	4,309	4,276	4,254	4,227	4,199
8	7,571	6,059	5,416	5,053	4,817	4,652	4,529	4,433	4,357	4,295	4,200	4,130	4,101	3,999	3,947	3,894	3,840	3,807	3,784	3,756	3,728
9	7,209	5,715	5,078	4,718	4,484	4,320	4,197	4,102	4,026	3,964	3,868	3,798	3,769	3,667	3,614	3,560	3,505	3,472	3,449	3,421	3,392
10	6,937	5,456	4,826	4,468	4,236	4,072	3,950	3,855	3,779	3,717	3,621	3,550	3,522	3,419	3,365	3,311	3,255	3,221	3,198	3,169	3,140
11	6,724	5,256	4,630	4,275	4,044	3,881	3,759	3,664	3,588	3,526	3,430	3,359	3,330	3,226	3,173	3,118	3,061	3,027	3,004	2,974	2,944
12	6,554	5,096	4,474	4,121	3,891	3,728	3,607	3,512	3,436	3,374	3,277	3,206	3,177	3,073	3,019	2,963	2,906	2,871	2,848	2,818	2,787
13	6,414	4,965	4,347	3,996	3,767	3,604	3,483	3,388	3,312	3,250	3,153	3,082	3,053	2,948	2,893	2,837	2,780	2,744	2,720	2,690	2,659
14	6,298	4,857	4,242	3,892	3,663	3,501	3,380	3,285	3,209	3,147	3,050	2,979	2,949	2,844	2,789	2,732	2,674	2,638	2,614	2,583	2,552
15	6,200	4,765	4,153	3,804	3,576	3,415	3,293	3,199	3,123	3,060	2,963	2,891	2,862	2,756	2,701	2,644	2,585	2,549	2,524	2,493	2,461
16	6,115	4,687	4,077	3,729	3,502	3,341	3,219	3,125	3,049	2,986	2,889	2,817	2,788	2,681	2,625	2,568	2,509	2,472	2,447	2,415	2,383
17	6,042	4,619	4,011	3,665	3,438	3,277	3,156	3,061	2,985	2,922	2,825	2,753	2,723	2,616	2,560	2,502	2,442	2,405	2,380	2,348	2,315
18	5,978	4,560	3,954	3,608	3,382	3,221	3,100	3,005	2,929	2,866	2,769	2,696	2,667	2,559	2,503	2,445	2,384	2,347	2,321	2,289	2,256
19	5,922	4,508	3,903	3,559	3,333	3,172	3,051	2,956	2,880	2,817	2,720	2,647	2,617	2,509	2,452	2,394	2,333	2,295	2,270	2,237	2,203
20	5,871	4,461	3,859	3,515	3,289	3,128	3,007	2,913	2,837	2,774	2,676	2,603	2,573	2,464	2,408	2,349	2,287	2,249	2,223	2,190	2,156
21	5,827	4,420	3,819	3,475	3,250	3,090	2,969	2,874	2,798	2,735	2,637	2,564	2,534	2,425	2,368	2,308	2,246	2,208	2,182	2,148	2,114
22	5,786	4,383	3,783	3,440	3,215	3,055	2,934	2,839	2,763	2,700	2,602	2,528	2,498	2,389	2,331	2,272	2,210	2,171	2,145	2,111	2,076
23	5,750	4,349	3,750	3,408	3,183	3,023	2,902	2,808	2,731	2,668	2,570	2,497	2,466	2,357	2,299	2,239	2,176	2,137	2,111	2,077	2,041
24	5,717	4,319	3,721	3,379	3,155	2,995	2,874	2,779	2,703	2,640	2,541	2,468	2,437	2,327	2,269	2,209	2,146	2,107	2,080	2,045	2,010
25	5,686	4,291	3,694	3,353	3,129	2,969	2,848	2,753	2,677	2,613	2,515	2,441	2,411	2,300	2,242	2,182	2,118	2,079	2,052	2,017	1,981
26	5,659	4,265	3,670	3,329	3,105	2,945	2,824	2,729	2,653	2,590	2,491	2,417	2,387	2,276	2,217	2,157	2,093	2,053	2,026	1,991	1,954
27	5,633	4,242	3,647	3,307	3,083	2,923	2,802	2,707	2,631	2,568	2,469	2,395	2,364	2,253	2,195	2,133	2,069	2,029	2,002	1,966	1,930
28	5,610	4,221	3,626	3,286	3,063	2,903	2,782	2,687	2,611	2,547	2,448	2,374	2,344	2,232	2,174	2,112	2,048	2,007	1,980	1,944	1,907
29	5,588	4,201	3,607	3,267	3,044	2,884	2,763	2,669	2,592	2,529	2,430	2,355	2,325	2,213	2,154	2,092	2,028	1,987	1,959	1,923	1,886
30	5,568	4,182	3,589	3,250	3,026	2,867	2,746	2,651	2,575	2,511	2,412	2,338	2,307	2,195	2,136	2,074	2,009	1,968	1,940	1,904	1,866
40	5,424	4,051	3,463	3,126	2,904	2,744	2,624	2,529	2,452	2,388	2,288	2,213	2,182	2,068	2,007	1,943	1,875	1,832	1,803	1,764	1,724
50	5,340	3,975	3,390	3,054	2,833	2,674	2,553	2,458	2,381	2,317	2,216	2,140	2,109	1,993	1,931	1,866	1,796	1,752	1,721	1,681	1,639
60	5,286	3,925	3,343	3,008	2,786	2,627	2,507	2,412	2,334	2,270	2,169	2,093	2,061	1,944	1,882	1,815	1,744	1,699	1,667	1,625	1,581
80	5,218	3,864	3,284	2,950	2,730	2,571	2,450	2,355	2,277	2,213	2,111	2,035	2,003	1,884	1,820	1,752	1,679	1,632	1,599	1,555	1,508
100	5,179	3,828	3,250	2,917	2,696	2,537	2,417	2,321	2,244	2,179	2,077	2,000	1,968	1,849	1,784	1,715	1,640	1,592	1,558	1,512	1,463
120	5,152	3,805	3,227	2,894	2,674	2,515	2,395	2,299	2,222	2,157	2,055	1,977	1,945	1,825	1,760	1,690	1,614	1,565	1,530	1,483	1,433

Quantile der F-Verteilung mit (n_1, n_2) -Freiheitsgraden zur Ordnung 0.95

n_2	n_1																				
	1	2	3	4	5	6	7	8	9	10	12	14	15	20	24	30	40	50	60	80	120
1	161,4	199,5	215,7	224,6	230,2	234,0	236,8	238,9	240,5	241,9	243,9	245,4	245,9	248,0	249,1	250,1	251,1	251,8	252,2	252,7	253,3
2	18,51	19,00	19,16	19,25	19,30	19,33	19,35	19,37	19,38	19,40	19,41	19,42	19,43	19,45	19,45	19,46	19,47	19,5	19,48	19,48	19,49
3	10,13	9,55	9,277	9,117	9,013	8,941	8,887	8,845	8,812	8,786	8,745	8,715	8,703	8,660	8,639	8,617	8,594	8,581	8,572	8,561	8,549
4	7,709	6,944	6,591	6,388	6,256	6,163	6,094	6,041	5,999	5,964	5,912	5,873	5,858	5,803	5,774	5,746	5,717	5,699	5,688	5,673	5,658
5	6,608	5,786	5,409	5,192	5,050	4,950	4,876	4,818	4,772	4,735	4,678	4,636	4,619	4,558	4,527	4,496	4,464	4,444	4,431	4,415	4,398
6	5,987	5,143	4,757	4,534	4,387	4,284	4,207	4,147	4,099	4,060	4,000	3,956	3,938	3,874	3,841	3,808	3,774	3,754	3,740	3,722	3,705
7	5,591	4,737	4,347	4,120	3,972	3,866	3,787	3,726	3,677	3,637	3,575	3,529	3,511	3,445	3,410	3,376	3,340	3,319	3,304	3,286	3,267
8	5,318	4,459	4,066	3,838	3,687	3,581	3,500	3,438	3,388	3,347	3,284	3,237	3,218	3,150	3,115	3,079	3,043	3,020	3,005	2,986	2,967
9	5,117	4,256	3,863	3,633	3,482	3,374	3,293	3,230	3,179	3,137	3,073	3,025	3,006	2,936	2,900	2,864	2,826	2,803	2,787	2,768	2,748
10	4,965	4,103	3,708	3,478	3,326	3,217	3,135	3,072	3,020	2,978	2,913	2,865	2,845	2,774	2,737	2,700	2,661	2,637	2,621	2,601	2,580
11	4,844	3,982	3,587	3,357	3,204	3,095	3,012	2,948	2,896	2,854	2,788	2,739	2,719	2,646	2,609	2,570	2,531	2,507	2,490	2,469	2,448
12	4,747	3,885	3,490	3,259	3,106	2,996	2,913	2,849	2,796	2,753	2,687	2,637	2,617	2,544	2,505	2,466	2,426	2,401	2,384	2,363	2,341
13	4,667	3,806	3,411	3,179	3,025	2,915	2,832	2,767	2,714	2,671	2,604	2,554	2,533	2,459	2,420	2,380	2,339	2,314	2,297	2,275	2,252
14	4,600	3,739	3,344	3,112	2,958	2,848	2,764	2,699	2,646	2,602	2,534	2,484	2,463	2,388	2,349	2,308	2,266	2,241	2,223	2,201	2,178
15	4,543	3,682	3,287	3,056	2,901	2,790	2,707	2,641	2,588	2,544	2,475	2,424	2,403	2,328	2,288	2,247	2,204	2,178	2,160	2,137	2,114
16	4,494	3,634	3,239	3,007	2,852	2,741	2,657	2,591	2,538	2,494	2,425	2,373	2,352	2,276	2,235	2,194	2,151	2,124	2,106	2,083	2,059
17	4,451	3,592	3,197	2,965	2,810	2,699	2,614	2,548	2,494	2,450	2,381	2,329	2,308	2,230	2,190	2,148	2,104	2,077	2,058	2,035	2,011
18	4,414	3,555	3,160	2,928	2,773	2,661	2,577	2,510	2,456	2,412	2,342	2,290	2,269	2,191	2,150	2,107	2,063	2,035	2,017	1,993	1,968
19	4,381	3,522	3,127	2,895	2,740	2,628	2,544	2,477	2,423	2,378	2,308	2,256	2,234	2,155	2,114	2,071	2,026	1,999	1,980	1,955	1,930
20	4,351	3,493	3,098	2,866	2,711	2,599	2,514	2,447	2,393	2,348	2,278	2,225	2,203	2,124	2,082	2,039	1,994	1,966	1,946	1,922	1,896
21	4,325	3,467	3,072	2,840	2,685	2,573	2,488	2,420	2,366	2,321	2,250	2,197	2,176	2,096	2,054	2,010	1,965	1,936	1,916	1,891	1,866
22	4,301	3,443	3,049	2,817	2,661	2,549	2,464	2,397	2,342	2,297	2,226	2,173	2,151	2,071	2,028	1,984	1,938	1,909	1,889	1,864	1,838
23	4,279	3,422	3,028	2,796	2,640	2,528	2,442	2,375	2,320	2,275	2,204	2,150	2,128	2,048	2,005	1,961	1,914	1,885	1,865	1,839	1,813
24	4,260	3,403	3,009	2,776	2,621	2,508	2,423	2,355	2,300	2,255	2,183	2,130	2,108	2,027	1,984	1,939	1,892	1,863	1,842	1,816	1,790
25	4,242	3,385	2,991	2,759	2,603	2,490	2,405	2,337	2,282	2,236	2,165	2,111	2,089	2,007	1,964	1,919	1,872	1,842	1,822	1,796	1,768
26	4,225	3,369	2,975	2,743	2,587	2,474	2,388	2,321	2,265	2,220	2,148	2,094	2,072	1,990	1,946	1,901	1,853	1,823	1,803	1,776	1,749
27	4,210	3,354	2,960	2,728	2,572	2,459	2,373	2,305	2,250	2,204	2,132	2,078	2,056	1,974	1,930	1,884	1,836	1,806	1,785	1,758	1,731
28	4,196	3,340	2,947	2,714	2,558	2,445	2,359	2,291	2,236	2,190	2,118	2,064	2,041	1,959	1,915	1,869	1,820	1,790	1,769	1,742	1,714
29	4,183	3,328	2,934	2,701	2,545	2,432	2,346	2,278	2,223	2,177	2,104	2,050	2,027	1,945	1,901	1,854	1,806	1,775	1,754	1,726	1,698
30	4,171	3,316	2,922	2,690	2,534	2,421	2,334	2,266	2,211	2,165	2,092	2,037	2,015	1,932	1,887	1,841	1,792	1,761	1,740	1,712	1,683
40	4,085	3,232	2,839	2,606	2,449	2,336	2,249	2,180	2,124	2,077	2,003	1,948	1,924	1,839	1,793	1,744	1,693	1,660	1,637	1,608	1,577
50	4,034	3,183	2,790	2,557	2,400	2,286	2,199	2,130	2,073	2,026	1,952	1,895	1,871	1,784	1,737	1,687	1,634	1,599	1,576	1,544	1,511
60	4,001	3,150	2,758	2,525	2,368	2,254	2,167	2,097	2,040	1,993	1,917	1,860	1,836	1,748	1,700	1,649	1,594	1,559	1,534	1,502	1,467
80	3,960	3,111	2,719	2,486	2,329	2,214	2,126	2,056	1,999	1,951	1,875	1,817	1,793	1,703	1,654	1,602	1,545	1,508	1,482	1,448	1,411
100	3,936	3,087	2,696	2,463	2,305	2,191	2,103	2,032	1,975	1,927	1,850	1,792	1,768	1,676	1,627	1,573	1,515	1,477	1,450	1,415	1,376
120	3,920	3,072	2,680	2,447	2,290	2,175	2,087	2,016	1,959	1,910	1,834	1,775	1,750	1,659	1,608	1,554	1,495	1,457	1,429	1,392	1,352