Tabela da Distribuição F-Snedecor

Quantis da distribuição F-Snedecor para alguns valores de α

Vamos calcular os quantis da distribuição F-Snedecor, ou seja, vamos achar $f_{\alpha;\nu_1,\nu_2}$ tal que $P(F \leq f_{\alpha;\nu_1,\nu_2}) = \alpha$ para $\alpha \in \{0,9; 0,95; 0,975; 0,99; 0,995\}$. Note que, pelas características da distribuição F-Snedecor, temos que $f_{1-\alpha} = \frac{1}{f_{\alpha;\nu_1,\nu_2}}$.

Quantis para a probabilidade de $\alpha = 0,9$

v1\v2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	30	60	120	240
1	39,8635	8,5263	5,5383	4,5448	4,0604	3,7759	3,5894	3,4579	3,3603	3,2850	3,2252	3,1765	3,1362	3,1022	3,0732	3,0481	3,0262	3,0070	2,9899	2,9747	2,9610	2,9486	2,9374	2,9271	2,9177	2,8807	2,7911	2,7478	2,7266
2	49,5000	9,0000	5,4624	4,3246	3,7797	3,4633	3,2574	3,1131	3,0065	2,9245	2,8595	2,8068	2,7632	2,7265	2,6952	2,6682	2,6446	2,6239	2,6056	2,5893	2,5746	2,5613	2,5493	2,5383	2,5283	2,4887	2,3933	2,3473	2,3248
3	53,5932	9,1618	5,3908	4,1909	3,6195	3,2888	3,0741	2,9238	2,8129	2,7277	2,6602	2,6055	2,5603	2,5222	2,4898	2,4618	2,4374	2,4160	2,3970	2,3801	2,3649	2,3512	2,3387	2,3274	2,3170	2,2761	2,1774	2,1300	2,1067
4	55,8330	9,2434	5,3426	4,1072	3,5202	3,1808	2,9605	2,8064	2,6927	2,6053	2,5362	2,4801	2,4337	2,3947	2,3614	2,3327	2,3077	2,2858	2,2663	2,2489	2,2333	2,2193	2,2065	2,1949	2,1842	2,1422	2,0410	1,9923	1,9684
5	57,2401	9,2926	5,3092	4,0506	3,4530	3,1075	2,8833	2,7264	2,6106	2,5216	2,4512	2,3940	2,3467	2,3069	2,2730	2,2438	2,2183	2,1958	2,1760	2,1582	2,1423	2,1279	2,1149	2,1030	2,0922	2,0492	1,9457	1,8959	1,8714
6	58,2044	9,3255	5,2847	4,0097	3,4045	3,0546	2,8274	2,6683	2,5509	2,4606	2,3891	2,3310	2,2830	2,2426	2,2081	2,1783	2,1524	2,1296	2,1094	2,0913	2,0751	2,0605	2,0472	2,0351	2,0241	1,9803	1,8747	1,8238	1,7988
7	58,9060	9,3491	5,2662	3,9790	3,3679	3,0145	2,7849	2,6241	2,5053	2,4140	2,3416	2,2828	2,2341	2,1931	2,1582	2,1280	2,1017	2,0785	2,0580	2,0397	2,0233	2,0084	1,9949	1,9826	1,9714	1,9269	1,8194	1,7675	1,7420
8	59,4390	9,3668	5,2517	3,9549	3,3393	2,9830	2,7516	2,5893	2,4694	2,3772	2,3040	2,2446	2,1953	2,1539	2,1185	2,0880	2,0613	2,0379	2,0171	1,9985	1,9819	1,9668	1,9531	1,9407	1,9292	1,8841	1,7748	1,7220	1,6959
9	59,8576	9,3805	5,2400	3,9357	3,3163	2,9577	2,7247	2,5612	2,4403	2,3473	2,2735	2,2135	2,1638	2,1220	2,0862	2,0553	2,0284	2,0047	1,9836	1,9649	1,9480	1,9327	1,9189	1,9063	1,8947	1,8490	1,7380	1,6842	1,6578
10	60,1950	9,3916	5,2304	3,9199	3,2974	2,9369	2,7025	2,5380	2,4163	2,3226	2,2482	2,1878	2,1376	2,0954	2,0593	2,0281	2,0009	1,9770	1,9557	1,9367	1,9197	1,9043	1,8903	1,8775	1,8658	1,8195	1,7070	1,6524	1,6254
11	60,4727	9,4006	5,2224	3,9067	3,2816	2,9195	2,6839	2,5186	2,3961	2,3018	2,2269	2,1660	2,1155	2,0729	2,0366	2,0051	1,9777	1,9535	1,9321	1,9129	1,8956	1,8801	1,8659	1,8530	1,8412	1,7944	1,6805	1,6250	1,5976
12	60,7052	9,4081	5,2156	3,8955	3,2682	2,9047	2,6681	2,5020	2,3789	2,2841	2,2087	2,1474	2,0966	2,0537	2,0171	1,9854	1,9577	1,9333	1,9117	1,8924	1,8750	1,8593	1,8450	1,8319	1,8200	1,7727	1,6574	1,6012	1,5734
13	60,9028	9,4145	5,2098	3,8859	3,2567	2,8920	2,6545	2,4876	2,3640	2,2687	2,1930	2,1313	2,0802	2,0370	2,0001	1,9682	1,9404	1,9158	1,8940	1,8745	1,8570	1,8411	1,8267	1,8136	1,8015	1,7538	1,6372	1,5803	1,5520
14	61,0727	9,4200	5,2047	3,8776	3,2468	2,8809	2,6426	2,4752	2,3510	2,2553	2,1792	2,1173	2,0658	2,0224	1,9853	1,9532	1,9252	1,9004	1,8785	1,8588	1,8412	1,8252	1,8107	1,7974	1,7853	1,7371	1,6193	1,5617	1,5331
15	61,2203	9,4247	5,2003	3,8704	3,2380	2,8712	2,6322	2,4642	2,3396	2,2435	2,1671	2,1049	2,0532	2,0095	1,9722	1,9399	1,9117	1,8868	1,8647	1,8449	1,8271	1,8111	1,7964	1,7831	1,7708	1,7223	1,6034	1,5450	1,5160
16	61,3499	9,4289	5,1964	3,8639	3,2303	2,8626	2,6230	2,4545	2,3295	2,2330	2,1563	2,0938	2,0419	1,9981	1,9605	1,9281	1,8997	1,8747	1,8524	1,8325	1,8146	1,7984	1,7837	1,7703	1,7579	1,7090	1,5890	1,5300	1,5006
17	61,4644	9,4325	5,1929	3,8582	3,2234	2,8550	2,6148	2,4458	2,3205	2,2237	2,1467	2,0839	2,0318	1,9878	1,9501	1,9175	1,8889	1,8638	1,8414	1,8214	1,8034	1,7871	1,7723	1,7587	1,7463	1,6970	1,5760	1,5164	1,4867
18	61,5664	9,4358	5,1898	3,8531	3,2172	2,8481	2,6074	2,4380	2,3123	2,2153	2,1380	2,0750	2,0227	1,9785	1,9407	1,9079	1,8792	1,8539	1,8314	1,8113	1,7932	1,7768	1,7619	1,7483	1,7358	1,6862	1,5642	1,5039	1,4739
19	61,6579	9,4387	5,1870	3,8485	3,2117	2,8419	2,6008	2,4310	2,3050	2,2077	2,1302	2,0670	2,0145	1,9701	1,9321	1,8992	1,8704	1,8450	1,8224	1,8022	1,7840	1,7675	1,7525	1,7388	1,7263	1,6763	1,5534	1,4926	1,4622
20	61,7403	9,4413	5,1845	3,8443	3,2067	2,8363	2,5947	2,4246	2,2983	2,2007	2,1230	2,0597	2,0070	1,9625	1,9243	1,8913	1,8624	1,8368	1,8142	1,7938	1,7756	1,7590	1,7439	1,7302	1,7175	1,6673	1,5435	1,4821	1,4514
21	61,8150	9,4437	5,1822	3,8405	3,2021	2,8312	2,5892	2,4188	2,2922	2,1944	2,1165	2,0530	2,0001	1,9555	1,9172	1,8840	1,8550	1,8294	1,8066	1,7862	1,7678	1,7512	1,7360	1,7222	1,7095	1,6590	1,5343	1,4724	1,4414
22	61,8829	9,4458	5,1801	3,8371	3,1979	2,8266	2,5842	2,4135	2,2867	2,1887	2,1106	2,0469	1,9939	1,9490	1,9106	1,8774	1,8482	1,8225	1,7997	1,7792	1,7607	1,7440	1,7288	1,7149	1,7021	1,6514	1,5259	1,4634	1,4321
23	61,9450	9,4478	5,1781	3,8339	3,1941	2,8223	2,5796	2,4086	2,2816	2,1833	2,1051	2,0412	1,9881	1,9431	1,9046	1,8712	1,8420	1,8162	1,7932	1,7727	1,7541	1,7374	1,7221	1,7081	1,6953	1,6443	1,5180	1,4550	1,4234
24	62,0020	9,4496	5,1764	3,8310	3,1905	2,8183	2,5753	2,4041	2,2768	2,1784	2,1000	2,0360	1,9827	1,9377	1,8990	1,8656	1,8362	1,8103	1,7873	1,7667	1,7481	1,7312	1,7159	1,7019	1,6890	1,6377	1,5107	1,4472	1,4153
25	62,0545	9,4513	5,1747	3,8283	3,1873	2,8147	2,5714	2,3999	2,2725	2,1739	2,0953	2,0312	1,9778	1,9326	1,8939	1,8603	1,8309	1,8049	1,7818	1,7611	1,7424	1,7255	1,7101	1,6960	1,6831	1,6316	1,5039	1,4399	1,4077
30	62,2650	9,4579	5,1681	3,8174	3,1741	2,8000	2,5555	2,3830	2,2547	2,1554	2,0762	2,0115	1,9576	1,9119	1,8728	1,8388	1,8090	1,7827	1,7592	1,7382	1,7193	1,7021	1,6864	1,6721	1,6589	1,6065	1,4755	1,4094	1,3759
60	62,7943	9,4746	5,1512	3,7896	3,1402	2,7620	2,5142	2,3391	2,2085	2,1072	2,0261	1,9597	1,9043	1,8572	1,8168	1,7816	1,7506	1,7232	1,6988	1,6768	1,6569	1,6389	1,6224	1,6073	1,5934	1,5376	1,3952	1,3203	1,2811
120	63,0606	9,4829	5,1425	3,7753	3,1228	2,7423	2,4928	2,3162	2,1843	2,0818	1,9997	1,9323	1,8759	1,8280	1,7867	1,7507	1,7191	1,6910	1,6659	1,6433	1,6228	1,6041	1,5871	1,5715	1,5570	1,4989	1,3476	1,2646	1,2191
240	63,1942	9,4871	5,1381	3,7680	3,1139	2,7323	2,4819	2,3045	2,1719	2,0687	1,9860	1,9181	1,8612	1,8128	1,7711	1,7347	1,7026	1,6741	1,6486	1,6256	1,6048	1,5858	1,5685	1,5525	1,5378	1,4782	1,3209	1,2315	1,1802

Quantis para a probabilidade de $\alpha = 0,95$

v1\v2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	30	60	120	240
1	161,4476	18,5128	10,1280	7,7086	6,6079	5,9874	5,5914	5,3177	5,1174	4,9646	4,8443	4,7472	4,6672	4,6001	4,5431	4,4940	4,4513	4,4139	4,3807	4,3512	4,3248	4,3009	4,2793	4,2597	4,2417	4,1709	4,0012	3,9201	3,8805
2	199,5000	19,0000	9,5521	6,9443	5,7861	5,1433	4,7374	4,4590	4,2565	4,1028	3,9823	3,8853	3,8056	3,7389	3,6823	3,6337	3,5915	3,5546	3,5219	3,4928	3,4668	3,4434	3,4221	3,4028	3,3852	3,3158	3,1504	3,0718	3,0334
3	215,7073	19,1643	9,2766	6,5914	5,4095	4,7571	4,3468	4,0662	3,8625	3,7083	3,5874	3,4903	3,4105	3,3439	3,2874	3,2389	3,1968	3,1599	3,1274	3,0984	3,0725	3,0491	3,0280	3,0088	2,9912	2,9223	2,7581	2,6802	2,6422
4	224,5832	19,2468	9,1172	6,3882	5,1922	4,5337	4,1203	3,8379	3,6331	3,4780	3,3567	3,2592	3,1791	3,1122	3,0556	3,0069	2,9647	2,9277	2,8951	2,8661	2,8401	2,8167	2,7955	2,7763	2,7587	2,6896	2,5252	2,4472	2,4093
5	230,1619	19,2964	9,0135	6,2561	5,0503	4,3874	3,9715	3,6875	3,4817	3,3258	3,2039	3,1059	3,0254	2,9582	2,9013	2,8524	2,8100	2,7729	2,7401	2,7109	2,6848	2,6613	2,6400	2,6207	2,6030	2,5336	2,3683	2,2899	2,2516
6	233,9860	19,3295	8,9406	6,1631	4,9503	4,2839	3,8660	3,5806	3,3738	3,2172	3,0946	2,9961	2,9153	2,8477	2,7905	2,7413	2,6987	2,6613	2,6283	2,5990	2,5727	2,5491	2,5277	2,5082	2,4904	2,4205	2,2541	2,1750	2,1365
7	236,7684	19,3532	8,8867	6,0942	4,8759	4,2067	3,7870	3,5005	3,2927	3,1355	3,0123	2,9134	2,8321	2,7642	2,7066	2,6572	2,6143	2,5767	2,5435	2,5140	2,4876	2,4638	2,4422	2,4226	2,4047	2,3343	2,1665	2,0868	2,0479
8	238,8827	19,3710	8,8452	6,0410	4,8183	4,1468	3,7257	3,4381	3,2296	3,0717	2,9480	2,8486	2,7669	2,6987	2,6408	2,5911	2,5480	2,5102	2,4768	2,4471	2,4205	2,3965	2,3748	2,3551	2,3371	2,2662	2,0970	2,0164	1,9770
9	240,5433	19,3848	8,8123	5,9988	4,7725	4,0990	3,6767	3,3881	3,1789	3,0204	2,8962	2,7964	2,7144	2,6458	2,5876	2,5377	2,4943	2,4563	2,4227	2,3928	2,3660	2,3419	2,3201	2,3002	2,2821	2,2107	2,0401	1,9588	1,9190
10	241,8817	19,3959	8,7855	5,9644	4,7351	4,0600	3,6365	3,3472	3,1373	2,9782	2,8536	2,7534	2,6710	2,6022	2,5437	2,4935	2,4499	2,4117	2,3779	2,3479	2,3210	2,2967	2,2747	2,2547	2,2365	2,1646	1,9926	1,9105	1,8703
11	242,9835	19,4050	8,7633	5,9358	4,7040	4,0274	3,6030	3,3130	3,1025	2,9430	2,8179	2,7173	2,6347	2,5655	2,5068	2,4564	2,4126	2,3742	2,3402	2,3100	2,2829	2,2585	2,2364	2,2163	2,1979	2,1256	1,9522	1,8693	1,8287
12	243,9060	19,4125	8,7446	5,9117	4,6777	3,9999	3,5747	3,2839	3,0729	2,9130	2,7876	2,6866	2,6037	2,5342	2,4753	2,4247	2,3807	2,3421	2,3080	2,2776	2,2504	2,2258	2,2036	2,1834	2,1649	2,0921	1,9174	1,8337	1,7927
13	244,6898	19,4189	8,7287	5,8911	4,6552	3,9764	3,5503	3,2590	3,0475	2,8872	2,7614	2,6602	2,5769	2,5073	2,4481	2,3973	2,3531	2,3143	2,2800	2,2495	2,2222	2,1975	2,1752	2,1548	2,1362	2,0630	1,8870	1,8026	1,7611
14	245,3640	19,4244	8,7149	5,8733	4,6358	3,9559	3,5292	3,2374	3,0255	2,8647	2,7386	2,6371	2,5536	2,4837	2,4244	2,3733	2,3290	2,2900	2,2556	2,2250	2,1975	2,1727	2,1502	2,1298	2,1111	2,0374	1,8602	1,7750	1,7332
15	245,9499	19,4291	8,7029	5,8578	4,6188	3,9381	3,5107	3,2184	3,0061	2,8450	2,7186	2,6169	2,5331	2,4630	2,4034	2,3522	2,3077	2,2686	2,2341	2,2033	2,1757	2,1508	2,1282	2,1077	2,0889	2,0148	1,8364	1,7505	1,7082
16	246,4639	19,4333	8,6923	5,8441	4,6038	3,9223	3,4944	3,2016	2,9890	2,8276	2,7009	2,5989	2,5149	2,4446	2,3849	2,3335	2,2888	2,2496	2,2149	2,1840	2,1563	2,1313	2,1086	2,0880	2,0691	1,9946	1,8151	1,7285	1,6858
17	246,9184	19,4370	8,6829	5,8320	4,5904	3,9083	3,4799	3,1867	2,9737	2,8120	2,6851	2,5828	2,4987	2,4282	2,3683	2,3167	2,2719	2,2325	2,1977	2,1667	2,1389	2,1138	2,0910	2,0703	2,0513	1,9765	1,7959	1,7085	1,6655
18	247,3232	19,4402	8,6745	5,8211	4,5785	3,8957	3,4669	3,1733	2,9600	2,7980	2,6709	2,5684	2,4841	2,4134	2,3533	2,3016	2,2567	2,2172	2,1823	2,1511	2,1232	2,0980	2,0751	2,0543	2,0353	1,9601	1,7784	1,6904	1,6470
19	247,6861	19,4431	8,6670	5,8114	4,5678	3,8844	3,4551	3,1613	2,9477	2,7854	2,6581	2,5554	2,4709	2,4000	2,3398	2,2880	2,2429	2,2033	2,1683	2,1370	2,1090	2,0837	2,0608	2,0399	2,0207	1,9452	1,7625	1,6739	1,6301
20	248,0131	19,4458	8,6602	5,8025	4,5581	3,8742	3,4445	3,1503	2,9365	2,7740	2,6464	2,5436	2,4589	2,3879	2,3275	2,2756	2,2304	2,1906	2,1555	2,1242	2,0960	2,0707	2,0476	2,0267	2,0075	1,9317	1,7480	1,6587	1,6145
21	248,3094	19,4481	8,6540	5,7945	4,5493	3,8649	3,4349	3,1404	2,9263	2,7636	2,6358	2,5328	2,4479	2,3768	2,3163	2,2642	2,2189	2,1791	2,1438	2,1124	2,0842	2,0587	2,0356	2,0146	1,9953	1,9192	1,7346	1,6447	1,6001
22	248,5791	19,4503	8,6484	5,7872	4,5413	3,8564	3,4260	3,1313	2,9169	2,7541	2,6261	2,5229	2,4379	2,3667	2,3060	2,2538	2,2084	2,1685	2,1331	2,1016	2,0733	2,0478	2,0246	2,0035	1,9842	1,9077	1,7222	1,6317	1,5868
23	248,8256	19,4523	8,6432	5,7805	4,5339	3,8486	3,4179	3,1229	2,9084	2,7453	2,6172	2,5139	2,4287	2,3573	2,2966	2,2443	2,1987	2,1587	2,1233	2,0917	2,0633	2,0377	2,0144	1,9932	1,9738	1,8972	1,7108	1,6197	1,5744
24	249,0518	19,4541	8,6385	5,7744	4,5272	3,8415	3,4105	3,1152	2,9005	2,7372	2,6090	2,5055	2,4202	2,3487	2,2878	2,2354	2,1898	2,1497	2,1141	2,0825	2,0540	2,0283	2,0050	1,9838	1,9643	1,8874	1,7001	1,6084	1,5628
25	249,2601	19,4558	8,6341	5,7687	4,5209	3,8348	3,4036	3,1081	2,8932	2,7298	2,6014	2,4977	2,4123	2,3407	2,2797	2,2272	2,1815	2,1413	2,1057	2,0739	2,0454	2,0196	1,9963	1,9750	1,9554	1,8782	1,6902	1,5980	1,5520
30	250,0951	19,4624	8,6166	5,7459	4,4957	3,8082	3,3758	3,0794	2,8637	2,6996	2,5705	2,4663	2,3803	2,3082	2,2468	2,1938	2,1477	2,1071	2,0712	2,0391	2,0102	1,9842	1,9605	1,9390	1,9192	1,8409	1,6491	1,5543	1,5069
60	252,1957	19,4791	8,5720	5,6877	4,4314	3,7398	3,3043	3,0053	2,7872	2,6211	2,4901	2,3842	2,2966	2,2229	2,1601	2,1058	2,0584	2,0166	1,9795	1,9464	1,9165	1,8894	1,8648	1,8424	1,8217	1,7396	1,5343	1,4290	1,3746
120	253,2529	19,4874	8,5494	5,6581	4,3985	3,7047	3,2674	2,9669	2,7475	2,5801	2,4480	2,3410	2,2524	2,1778	2,1141	2,0589	2,0107	1,9681	1,9302	1,8963	1,8657	1,8380	1,8128	1,7896	1,7684	1,6835	1,4673	1,3519	1,2896
240	253,7831	19,4916	8,5379	5,6431	4,3818	3,6869	3,2487	2,9474	2,7272	2,5592	2,4264	2,3188	2,2297	2,1545	2,0902	2,0346	1,9859	1,9428	1,9045	1,8702	1,8392	1,8110	1,7854	1,7619	1,7403	1,6536	1,4300	1,3067	1,2371

Quantis para a probabilidade de $\alpha = 0,975$

v1 \ v2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	30	60	120	240
1	647,789	38,506	17,443	12,218	10,007	8,813	8,073	7,571	7,209	6,937	6,724	6,554	6,414	6,298	6,200	6,115	6,042	5,978	5,922	5,872	5,827	5,786	5,750	5,717	5,686	5,568	5,286	5,152	5,088
2	799,500	39,000	16,044	10,649	8,434	7,260	6,542	6,060	5,715	5,456	5,256	5,096	4,965	4,857	4,765	4,687	4,619	4,560	4,508	4,461	4,420	4,383	4,349	4,319	4,291	4,182	3,925	3,805	3,746
3	864,163	39,166	15,439	9,979	7,764	6,599	5,890	5,416	5,078	4,826	4,630	4,474	4,347	4,242	4,153	4,077	4,011	3,954	3,903	3,859	3,819	3,783	3,751	3,721	3,694	3,589	3,343	3,227	3,171
4	899,583	39,248	15,101	9,605	7,388	6,227	5,523	5,053	4,718	4,468	4,275	4,121	3,996	3,892	3,804	3,729	3,665	3,608	3,559	3,515	3,475	3,440	3,408	3,379	3,353	3,250	3,008	2,894	2,840
5	921,848	39,298	14,885	9,365	7,146	5,988	5,285	4,817	4,484	4,236	4,044	3,891	3,767	3,663	3,576	3,502	3,438	3,382	3,333	3,289	3,250	3,215	3,184	3,155	3,129	3,027	2,786	2,674	2,620
6	937,111	39,332	14,735	9,197	6,978	5,820	5,119	4,652	4,320	4,072	3,881	3,728	3,604	3,501	3,415	3,341	3,277	3,221	3,172	3,128	3,090	3,055	3,023	2,995	2,969	2,867	2,627	2,515	2,461
7	948,217	39,355	14,624	9,074	6,853	5,696	4,995	4,529	4,197	3,950	3,759	3,607	3,483	3,380	3,293	3,219	3,156	3,100	3,051	3,007	2,969	2,934	2,902	2,874	2,848	2,746	2,507	2,395	2,341
8	956,656	39,373	14,540	8,980	6,757	5,600	4,899	4,433	4,102	3,855	3,664	3,512	3,388	3,285	3,199	3,125	3,061	3,005	2,956	2,913	2,874	2,839	2,808	2,779	2,753	2,651	2,412	2,299	2,245
9	963,285	39,387	14,473	8,905	6,681	5,523	4,823	4,357	4,026	3,779	3,588	3,436	3,312	3,209	3,123	3,049	2,985	2,929	2,880	2,837	2,798	2,763	2,731	2,703	2,677	2,575	2,334	2,222	2,167
10	968,627	39,398	14,419	8,844	6,619	5,461	4,761	4,295	3,964	3,717	3,526	3,374	3,250	3,147	3,060	2,986	2,922	2,866	2,817	2,774	2,735	2,700	2,668	2,640	2,614	2,511	2,270	2,157	2,102
11	973,025	39,407	14,374	8,794	6,568	5,410	4,710	4,243	3,912	3,665	3,474	3,322	3,198	3,095	3,008	2,934	2,870	2,814	2,765	2,721	2,682	2,647	2,615	2,587	2,560	2,458	2,216	2,102	2,047
12	976,708	39,415	14,337	8,751	6,525	5,366	4,666	4,200	3,868	3,621	3,430	3,277	3,153	3,050	2,963	2,889	2,825	2,769	2,720	2,676	2,637	2,602	2,570	2,541	2,515	2,412	2,169	2,055	1,999
13	979,837	39,421	14,305	8,715	6,488	5,329	4,629	4,162	3,831	3,583	3,392	3,239	3,115	3,012	2,925	2,851	2,786	2,730	2,681	2,637	2,598	2,563	2,531	2,502	2,476	2,372	2,129	2,014	1,958
14	982,528	39,427	14,277	8,684	6,456	5,297	4,596	4,130	3,798	3,550	3,359	3,206	3,082	2,979	2,892	2,817	2,753	2,696	2,647	2,603	2,564	2,528	2,497	2,468	2,441	2,338	2,093	1,977	1,921
15	984,867	39,431	14,253	8,657	6,428	5,269	4,568	4,101	3,769	3,522	3,330	3,177	3,053	2,949	2,862	2,788	2,723	2,667	2,617	2,573	2,534	2,498	2,467	2,437	2,411	2,307	2,061	1,945	1,888
16	986,919	39,435	14,232	8,633	6,403	5,244	4,543	4,076	3,744	3,496	3,304	3,152	3,027	2,923	2,836	2,761	2,697	2,640	2,591	2,547	2,507	2,472	2,440	2,411	2,384	2,280	2,033	1,916	1,859
17	988,733	39,439	14,213	8,611	6,381	5,222	4,521	4,054	3,722	3,474	3,282	3,129	3,004	2,900	2,813	2,738	2,673	2,617	2,567	2,523	2,483	2,448	2,416	2,387	2,360	2,255	2,008	1,890	1,833
18	990,349	39,442	14,196	8,592	6,362	5,202	4,501	4,034	3,702	3,453	3,261	3,108	2,983	2,880	2,792	2,717	2,652	2,596	2,546	2,501	2,462	2,426	2,394	2,365	2,338	2,233	1,985	1,866	1,809
19	991,797	39,445	14,181	8,575	6,344	5,184	4,483	4,016	3,683	3,435	3,243	3,090	2,965	2,861	2,773	2,698	2,633	2,576	2,527	2,482	2,442	2,407	2,375	2,345	2,318	2,213	1,964	1,845	1,787
20	993,103	39,448	14,167	8,560	6,329	5,168	4,467	4,000	3,667	3,419	3,226	3,073	2,948	2,844	2,756	2,681	2,616	2,559	2,509	2,465	2,425	2,389	2,357	2,327	2,301	2,195	1,945	1,825	1,766
21	994,286	39,450	14,155	8,546	6,314	5,154	4,452	3,985	3,652	3,404	3,211	3,058	2,932	2,828	2,740	2,665	2,600	2,543	2,493	2,448	2,409	2,373	2,340	2,311	2,284	2,179	1,927	1,807	1,748
22	995,362	39,453	14,144	8,533	6,301	5,141	4,439	3,971	3,638	3,390	3,197	3,043	2,918	2,814	2,726	2,651	2,586	2,529	2,478	2,434	2,394	2,358	2,325	2,296	2,269	2,163	1,911	1,790	1,731
23	996,346	39,454	14,134	8,522	6,289	5,128	4,426	3,959	3,626	3,377	3,184	3,031	2,905	2,801	2,713	2,637	2,572	2,515	2,465	2,420	2,380	2,344	2,312	2,282	2,255	2,149	1,896	1,774	1,715
24	997,249	39,456	14,124	8,511	6,278	5,117	4,415	3,947	3,614	3,365	3,173	3,019	2,893	2,789	2,701	2,625	2,560	2,503	2,452	2,408	2,368	2,332	2,299	2,269	2,242	2,136	1,882	1,760	1,700
25	998,081	39,458	14,116	8,501	6,268	5,107	4,405	3,937	3,604	3,355	3,162	3,008	2,882	2,778	2,689	2,614	2,548	2,491	2,441	2,396	2,356	2,320	2,287	2,257	2,230	2,124	1,869	1,746	1,686
30	1001,414	39,465	14,081	8,461	6,227	5,065	4,362	3,894	3,560	3,311	3,118	2,963	2,837	2,732	2,644	2,568	2,502	2,445	2,394	2,349	2,308	2,272	2,239	2,209	2,182	2,074	1,815	1,690	1,628
60	1009,800	39,481	13,992	8,360	6,123	4,959	4,254	3,784	3,449	3,198	3,004	2,848	2,720	2,614	2,524	2,447	2,380	2,321	2,270	2,223	2,182	2,145	2,111	2,080	2,052	1,940	1,667	1,530	1,460
120	1014,020	39,490	13,947	8,309	6,069	4,904	4,199	3,728	3,392	3,140	2,944	2,787	2,659	2,552	2,461	2,383	2,315	2,256	2,203	2,156	2,114	2,076	2,042	2,010	1,981	1,866	1,581	1,433	1,354
240	1016,137	39,494	13,925	8,283	6,042	4,877	4,171	3,699	3,363	3,110	2,914	2,756	2,628	2,520	2,429	2,350	2,282	2,222	2,169	2,121	2,079	2,040	2,005	1,973	1,944	1,827	1,534	1,376	1,289

Quantis para a probabilidade de $\alpha = 0,99$

v1 \ v2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	30	60	120	240
1	4052,1807	98,5025	34,1162	21,1977	16,2582	13,7450	12,2464	11,2586	10,5614	10,0443	9,6460	9,3302	9,0738	8,8616	8,6831	8,5310	8,3997	8,2854	8,1849	8,0960	8,0166	7,9454	7,8811	7,8229	7,7698	7,5625	7,0771	6,8509	6,7417
2	4999,5000	99,0000	30,8165	18,0000	13,2739	10,9248	9,5466	8,6491	8,0215	7,5594	7,2057	6,9266	6,7010	6,5149	6,3589	6,2262	6,1121	6,0129	5,9259	5,8489	5,7804	5,7190	5,6637	5,6136	5,5680	5,3903	4,9774	4,7865	4,6947
3	5403,3520	99,1662	29,4567	16,6944	12,0600	9,7795	8,4513	7,5910	6,9919	6,5523	6,2167	5,9525	5,7394	5,5639	5,4170	5,2922	5,1850	5,0919	5,0103	4,9382	4,8740	4,8166	4,7649	4,7181	4,6755	4,5097	4,1259	3,9491	3,8642
4	5624,5833	99,2494	28,7099	15,9770	11,3919	9,1483	7,8466	7,0061	6,4221	5,9943	5,6683	5,4120	5,2053	5,0354	4,8932	4,7726	4,6690	4,5790	4,5003	4,4307	4,3688	4,3134	4,2636	4,2184	4,1774	4,0179	3,6490	3,4795	3,3982
5	5763,6496	99,2993	28,2371	15,5219	10,9670	8,7459	7,4604	6,6318	6,0569	5,6363	5,3160	5,0643	4,8616	4,6950	4,5556	4,4374	4,3359	4,2479	4,1708	4,1027	4,0421	3,9880	3,9392	3,8951	3,8550	3,6990	3,3389	3,1735	3,0943
6	5858,9861	99,3326	27,9107	15,2069	10,6723	8,4661	7,1914	6,3707	5,8018	5,3858	5,0692	4,8206	4,6204	4,4558	4,3183	4,2016	4,1015	4,0146	3,9386	3,8714	3,8117	3,7583	3,7102	3,6667	3,6272	3,4735	3,1187	2,9559	2,8778
7	5928,3557	99,3564	27,6717	14,9758	10,4555	8,2600	6,9928	6,1776	5,6129	5,2001	4,8861	4,6395	4,4410	4,2779	4,1415	4,0259	3,9267	3,8406	3,7653	3,6987	3,6396	3,5867	3,5390	3,4959	3,4568	3,3045	2,9530	2,7918	2,7145
8	5981,0703	99,3742	27,4892	14,7989	10,2893	8,1017	6,8400	6,0289	5,4671	5,0567	4,7445	4,4994	4,3021	4,1399	4,0045	3,8896	3,7910	3,7054	3,6305	3,5644	3,5056	3,4530	3,4057	3,3629	3,3239	3,1726	2,8233	2,6629	2,5860
9	6022,4732	99,3881	27,3452	14,6591	10,1578	7,9761	6,7188	5,9106	5,3511	4,9424	4,6315	4,3875	4,1911	4,0297	3,8948	3,7804	3,6822	3,5971	3,5225	3,4567	3,3981	3,3458	3,2986	3,2560	3,2172	3,0665	2,7185	2,5586	2,4819
10	6055,8467	99,3992	27,2287	14,5459	10,0510	7,8741	6,6201	5,8143	5,2565	4,8491	4,5393	4,2961	4,1003	3,9394	3,8049	3,6909	3,5931	3,5082	3,4338	3,3682	3,3098	3,2576	3,2106	3,1681	3,1294	2,9791	2,6318	2,4721	2,3955
11	6083,3168	99,4083	27,1326	14,4523	9,9626	7,7896	6,5382	5,7343	5,1779	4,7715	4,4624	4,2198	4,0245	3,8640	3,7299	3,6162	3,5185	3,4338	3,3596	3,2941	3,2357	3,1837	3,1368	3,0944	3,0558	2,9057	2,5587	2,3990	2,3223
12	6106,3207	99,4159	27,0518	14,3736	9,8883	7,7183	6,4691	5,6667	5,1114	4,7059	4,3974	4,1553	3,9603	3,8001	3,6662	3,5527	3,4552	3,3706	3,2965	3,2311	3,1730	3,1209	3,0740	3,0316	2,9931	2,8431	2,4961	2,3363	2,2595
13	6125,8647	99,4223	26,9831	14,3065	9,8248	7,6575	6,4100	5,6089	5,0545	4,6496	4,3416	4,0999	3,9052	3,7452	3,6115	3,4981	3,4007	3,3162	3,2422	3,1769	3,1187	3,0667	3,0199	2,9775	2,9389	2,7890	2,4419	2,2818	2,2049
14	6142,6740	99,4278	26,9238	14,2486	9,7700	7,6049	6,3590	5,5589	5,0052	4,6008	4,2932	4,0518	3,8573	3,6975	3,5639	3,4506	3,3533	3,2689	3,1949	3,1296	3,0715	3,0195	2,9727	2,9303	2,8917	2,7418	2,3943	2,2339	2,1568
15	6157,2846	99,4325	26,8722	14,1982	9,7222	7,5590	6,3143	5,5151	4,9621	4,5581	4,2509	4,0096	3,8154	3,6557	3,5222	3,4089	3,3117	3,2273	3,1533	3,0880	3,0299	2,9779	2,9311	2,8887	2,8502	2,7002	2,3523	2,1915	2,1141
16	6170,1012	99,4367	26,8269	14,1539	9,6802	7,5186	6,2750	5,4766	4,9240	4,5204	4,2134	3,9724	3,7783	3,6187	3,4852	3,3720	3,2748	3,1904	3,1165	3,0512	2,9931	2,9411	2,8943	2,8519	2,8133	2,6632	2,3148	2,1536	2,0759
17	6181,4348	99,4404	26,7867	14,1146	9,6429	7,4827	6,2401	5,4423	4,8902	4,4869	4,1801	3,9392	3,7452	3,5857	3,4523	3,3391	3,2419	3,1575	3,0836	3,0183	2,9602	2,9082	2,8613	2,8189	2,7803	2,6301	2,2811	2,1194	2,0414
18	6191,5287	99,4436	26,7509	14,0795	9,6096	7,4507	6,2089	5,4116	4,8599	4,4569	4,1503	3,9095	3,7156	3,5561	3,4228	3,3096	3,2124	3,1280	3,0541	2,9887	2,9306	2,8786	2,8317	2,7892	2,7506	2,6003	2,2507	2,0885	2,0102
19	6200,5756	99,4465	26,7188	14,0480	9,5797	7,4219	6,1808	5,3840	4,8327	4,4299	4,1234	3,8827	3,6888	3,5294	3,3961	3,2829	3,1857	3,1013	3,0274	2,9620	2,9039	2,8518	2,8049	2,7624	2,7238	2,5732	2,2230	2,0604	1,9817
20	6208,7302	99,4492	26,6898	14,0196	9,5526	7,3958	6,1554	5,3591	4,8080	4,4054	4,0990	3,8584	3,6646	3,5052	3,3719	3,2587	3,1615	3,0771	3,0031	2,9377	2,8796	2,8274	2,7805	2,7380	2,6993	2,5487	2,1978	2,0346	1,9556
21	6216,1184	99,4516	26,6635	13,9938	9,5281	7,3722	6,1324	5,3364	4,7856	4,3831	4,0769	3,8363	3,6425	3,4832	3,3498	3,2367	3,1394	3,0550	2,9810	2,9156	2,8574	2,8052	2,7583	2,7157	2,6770	2,5262	2,1747	2,0109	1,9316
22	6222,8433	99,4537	26,6396	13,9703	9,5058	7,3506	6,1113	5,3157	4,7651	4,3628	4,0566	3,8161	3,6224	3,4630	3,3297	3,2165	3,1192	3,0348	2,9607	2,8953	2,8370	2,7849	2,7378	2,6953	2,6565	2,5055	2,1533	1,9891	1,9094
23	6228,9903	99,4557	26,6176	13,9488	9,4853	7,3309	6,0921	5,2967	4,7463	4,3441	4,0380	3,7976	3,6038	3,4445	3,3111	3,1979	3,1006	3,0161	2,9421	2,8766	2,8183	2,7661	2,7191	2,6765	2,6377	2,4865	2,1336	1,9688	1,8889
24	6234,6309	99,4575	26,5975	13,9291	9,4665	7,3127	6,0743	5,2793	4,7290	4,3269	4,0209	3,7805	3,5868	3,4274	3,2940	3,1808	3,0835	2,9990	2,9249	2,8594	2,8010	2,7488	2,7017	2,6591	2,6203	2,4689	2,1154	1,9500	1,8697
25	6239,8251	99,4592	26,5790	13,9109	9,4491	7,2960	6,0580	5,2631	4,7130	4,3111	4,0051	3,7647	3,5710	3,4116	3,2782	3,1650	3,0676	2,9831	2,9089	2,8434	2,7850	2,7328	2,6856	2,6430	2,6041	2,4526	2,0984	1,9325	1,8519
30	6260,6486	99,4658	26,5045	13,8377	9,3793	7,2285	5,9920	5,1981	4,6486	4,2469	3,9411	3,7008	3,5070	3,3476	3,2141	3,1007	3,0032	2,9185	2,8442	2,7785	2,7200	2,6675	2,6202	2,5773	2,5383	2,3860	2,0285	1,8600	1,7777
60	6313,0301	99,4825	26,3164	13,6522	9,2020	7,0567	5,8236	5,0316	4,4831	4,0819	3,7761	3,5355	3,3413	3,1813	3,0471	2,9330	2,8348	2,7493	2,6742	2,6077	2,5484	2,4951	2,4471	2,4035	2,3637	2,2079	1,8363	1,6557	1,5651
120	6339,3913	99,4908	26,2211	13,5581	9,1118	6,9690	5,7373	4,9461	4,3978	3,9965	3,6904	3,4494	3,2548	3,0942	2,9595	2,8447	2,7459	2,6597	2,5839	2,5168	2,4568	2,4029	2,3542	2,3100	2,2696	2,1108	1,7263	1,5330	1,4322
240	6352,6139	99,4950	26,1732	13,5107	9,0662	6,9247	5,6936	4,9026	4,3544	3,9530	3,6467	3,4055	3,2105	3,0495	2,9144	2,7993	2,7000	2,6134	2,5372	2,4696	2,4092	2,3549	2,3058	2,2611	2,2203	2,0596	1,6660	1,4622	1,3515

Quantis para a probabilidade de $\alpha = 0,995$

v1 \ v2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	30	60	120	240
1	16210,7227	198,5013	55,5520	31,3328	22,7848	18,6350	16,2356	14,6882	13,6136	12,8265	12,2263	11,7542	11,3735	11,0603	10,7980	10,5755	10,3842	10,2181	10,0725	9,9439	9,8295	9,7271	9,6348	9,5513	9,4753	9,1797	8,4946	8,1788	8,0271
2	19999,5000	199,0000	49,7993	26,2843	18,3138	14,5441	12,4040	11,0424	10,1067	9,4270	8,9122	8,5096	8,1865	7,9216	7,7008	7,5138	7,3536	7,2148	7,0935	6,9865	6,8914	6,8064	6,7300	6,6609	6,5982	6,3547	5,7950	5,5393	5,4170
3	21614,7414	199,1664	47,4672	24,2591	16,5298	12,9166	10,8824	9,5965	8,7171	8,0807	7,6004	7,2258	6,9258	6,6804	6,4760	6,3034	6,1556	6,0278	5,9161	5,8177	5,7304	5,6524	5,5823	5,5190	5,4615	5,2388	4,7290	4,4972	4,3866
4	22499,5833	199,2497	46,1946	23,1545	15,5561	12,0275	10,0505	8,8051	7,9559	7,3428	6,8809	6,5211	6,2335	5,9984	5,8029	5,6378	5,4967	5,3746	5,2681	5,1743	5,0911	5,0168	4,9500	4,8898	4,8351	4,6234	4,1399	3,9207	3,8162
5	23055,7982	199,2996	45,3916	22,4564	14,9396	11,4637	9,5221	8,3018	7,4712	6,8724	6,4217	6,0711	5,7910	5,5623	5,3721	5,2117	5,0746	4,9560	4,8526	4,7616	4,6809	4,6088	4,5441	4,4857	4,4327	4,2276	3,7599	3,5482	3,4475
6	23437,1111	199,3330	44,8385	21,9746	14,5133	11,0730	9,1553	7,9520	7,1339	6,5446	6,1016	5,7570	5,4819	5,2574	5,0708	4,9134	4,7789	4,6627	4,5614	4,4721	4,3931	4,3225	4,2591	4,2019	4,1500	3,9492	3,4918	3,2849	3,1865
7	23714,5658	199,3568	44,4341	21,6217	14,2004	10,7859	8,8854	7,6941	6,8849	6,3025	5,8648	5,5245	5,2529	5,0313	4,8473	4,6920	4,5594	4,4448	4,3448	4,2569	4,1789	4,1094	4,0469	3,9905	3,9394	3,7416	3,2911	3,0874	2,9906
8	23925,4062	199,3746	44,1256	21,3520	13,9610	10,5658	8,6781	7,4959	6,6933	6,1159	5,6821	5,3451	5,0761	4,8566	4,6744	4,5207	4,3894	4,2759	4,1770	4,0900	4,0128	3,9440	3,8822	3,8264	3,7758	3,5801	3,1344	2,9330	2,8371
9	24091,0041	199,3885	43,8824	21,1391	13,7716	10,3915	8,5138	7,3386	6,5411	5,9676	5,5368	5,2021	4,9351	4,7173	4,5364	4,3838	4,2535	4,1410	4,0428	3,9564	3,8799	3,8116	3,7502	3,6949	3,6447	3,4505	3,0083	2,8083	2,7131
10	24224,4868	199,3996	43,6858	20,9667	13,6182	10,2500	8,3803	7,2106	6,4172	5,8467	5,4183	5,0855	4,8199	4,6034	4,4235	4,2719	4,1424	4,0305	3,9329	3,8470	3,7709	3,7030	3,6420	3,5870	3,5370	3,3440	2,9042	2,7052	2,6105
11	24334,3581	199,4087	43,5236	20,8243	13,4912	10,1329	8,2697	7,1045	6,3142	5,7462	5,3197	4,9884	4,7240	4,5085	4,3295	4,1785	4,0496	3,9382	3,8410	3,7555	3,6798	3,6123	3,5516	3,4967	3,4470	3,2547	2,8166	2,6183	2,5239
12	24426,3662	199,4163	43,3874	20,7047	13,3845	10,0343	8,1764	7,0149	6,2274	5,6613	5,2363	4,9062	4,6429	4,4281	4,2497	4,0994	3,9709	3,8599	3,7631	3,6779	3,6024	3,5350	3,4745	3,4199	3,3704	3,1787	2,7419	2,5439	2,4496
13	24504,5356	199,4227	43,2715	20,6027	13,2934	9,9501	8,0967	6,9384	6,1530	5,5887	5,1649	4,8358	4,5733	4,3591	4,1813	4,0314	3,9033	3,7926	3,6960	3,6111	3,5358	3,4686	3,4083	3,3538	3,3044	3,1132	2,6771	2,4796	2,3852
14	24571,7673	199,4282	43,1716	20,5148	13,2148	9,8774	8,0279	6,8721	6,0887	5,5257	5,1031	4,7748	4,5129	4,2993	4,1219	3,9723	3,8445	3,7341	3,6378	3,5530	3,4779	3,4108	3,3506	3,2962	3,2469	3,0560	2,6205	2,4228	2,3285
15	24630,2051	199,4329	43,0847	20,4383	13,1463	9,8140	7,9678	6,8143	6,0325	5,4707	5,0489	4,7213	4,4600	4,2468	4,0698	3,9205	3,7929	3,6827	3,5866	3,5020	3,4270	3,3600	3,2999	3,2456	3,1963	3,0057	2,5705	2,3727	2,2783
16	24681,4673	199,4371	43,0083	20,3710	13,0861	9,7582	7,9148	6,7633	5,9829	5,4221	5,0011	4,6741	4,4132	4,2005	4,0237	3,8747	3,7473	3,6373	3,5412	3,4568	3,3818	3,3150	3,2549	3,2007	3,1515	2,9611	2,5260	2,3281	2,2335
17	24726,7982	199,4408	42,9407	20,3113	13,0327	9,7086	7,8678	6,7180	5,9388	5,3789	4,9586	4,6321	4,3716	4,1592	3,9827	3,8338	3,7066	3,5967	3,5008	3,4164	3,3416	3,2748	3,2148	3,1606	3,1114	2,9211	2,4859	2,2878	2,1931
18	24767,1704	199,4440	42,8804	20,2581	12,9850	9,6644	7,8258	6,6775	5,8994	5,3403	4,9205	4,5945	4,3344	4,1221	3,9459	3,7972	3,6701	3,5603	3,4645	3,3802	3,3054	3,2387	3,1787	3,1246	3,0754	2,8852	2,4498	2,2514	2,1565
19	24803,3549	199,4470	42,8263	20,2104	12,9422	9,6247	7,7881	6,6411	5,8639	5,3055	4,8863	4,5606	4,3008	4,0888	3,9127	3,7641	3,6372	3,5275	3,4318	3,3475	3,2728	3,2060	3,1461	3,0920	3,0429	2,8526	2,4171	2,2183	2,1232
20	24835,9709	199,4496	42,7775	20,1673	12,9035	9,5888	7,7540	6,6082	5,8318	5,2740	4,8552	4,5299	4,2703	4,0585	3,8826	3,7342	3,6073	3,4977	3,4020	3,3178	3,2431	3,1764	3,1165	3,0624	3,0133	2,8230	2,3872	2,1881	2,0927
21	24865,5213	199,4520	42,7333	20,1282	12,8684	9,5562	7,7230	6,5783	5,8027	5,2454	4,8270	4,5020	4,2426	4,0310	3,8552	3,7069	3,5801	3,4705	3,3749	3,2907	3,2160	3,1494	3,0895	3,0354	2,9862	2,7960	2,3598	2,1603	2,0647
22	24892,4186	199,4541	42,6929	20,0925	12,8364	9,5264	7,6947	6,5509	5,7760	5,2192	4,8012	4,4765	4,2173	4,0058	3,8301	3,6819	3,5552	3,4456	3,3500	3,2658	3,1911	3,1246	3,0646	3,0106	2,9615	2,7712	2,3346	2,1347	2,0388
23	24916,9990	199,4561	42,6561	20,0599	12,8071	9,4992	7,6688	6,5260	5,7516	5,1953	4,7775	4,4530	4,1940	3,9827	3,8070	3,6590	3,5323	3,4228	3,3272	3,2431	3,1684	3,1018	3,0419	2,9878	2,9387	2,7483	2,3114	2,1110	2,0148
24	24939,5653	199,4579	42,6222	20,0300	12,7802	9,4742	7,6450	6,5029	5,7292	5,1732	4,7557	4,4314	4,1726	3,9614	3,7859	3,6378	3,5112	3,4017	3,3062	3,2220	3,1474	3,0807	3,0208	2,9667	2,9176	2,7272	2,2898	2,0890	1,9925
25	24960,3405	199,4596	42,5910	20,0024	12,7554	9,4511	7,6230	6,4817	5,7084	5,1528	4,7356	4,4115	4,1528	3,9416	3,7662	3,6182	3,4916	3,3822	3,2867	3,2025	3,1279	3,0613	3,0014	2,9472	2,8981	2,7076	2,2697	2,0686	1,9717
30	25043,6277	199,4663	42,4658	19,8915	12,6556	9,3582	7,5345	6,3961	5,6248	5,0706	4,6543	4,3309	4,0727	3,8619	3,6867	3,5389	3,4124	3,3030	3,2075	3,1234	3,0488	2,9821	2,9221	2,8679	2,8187	2,6278	2,1874	1,9840	1,8856
60	25253,1369	199,4829	42,1494	19,6107	12,4024	9,1219	7,3088	6,1772	5,4104	4,8592	4,4450	4,1229	3,8655	3,6552	3,4803	3,3324	3,2058	3,0962	3,0004	2,9159	2,8408	2,7736	2,7132	2,6585	2,6088	2,4151	1,9622	1,7469	1,6401
120	25358,5735	199,4912	41,9895	19,4684	12,2737	9,0015	7,1933	6,0649	5,3001	4,7501	4,3367	4,0149	3,7577	3,5473	3,3722	3,2240	3,0971	2,9871	2,8908	2,8058	2,7302	2,6625	2,6015	2,5463	2,4961	2,2998	1,8341	1,6055	1,4879
240	25411,4599	199,4954	41,9090	19,3967	12,2088	8,9406	7,1349	6,0080	5,2441	4,6947	4,2815	3,9598	3,7026	3,4921	3,3167	3,1683	3,0411	2,9308	2,8342	2,7488	2,6729	2,6048	2,5435	2,4879	2,4372	2,2391	1,7641	1,5243	1,3961