**Tabela 1:** Função de Distribuição da Normal Padrão (N(0,1)).

$$\Phi(x) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{x} e^{-y^2/2} dy$$

X	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.4	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986
3.0	0.998650	0.998694	0.998736	0.998777	0.998817	0.998856	0.998893	0.998930	0.998965	0.998999
3.1	0.999032	0.999064	0.999096	0.999126	0.999155	0.999184	0.999211	0.999238	0.999264	0.999289
3.2	0.999313	0.999336	0.999359	0.999381	0.999402	0.999423	0.999443	0.999462	0.999481	0.999499
3.3	0.999517	0.999533	0.999550	0.999566	0.999581	0.999596	0.999610	0.999624	0.999638	0.999650
3.4	0.999663	0.999675	0.999687	0.999698	0.999709	0.999720	0.999730	0.999740	0.999749	0.999758
3.5	0.999767	0.999776	0.999784	0.999792	0.999800	0.999807	0.999815	0.999821	0.999828	0.999835
3.6	0.999841	0.999847	0.999853	0.999858	0.999864	0.999869	0.999874	0.999879	0.999883	0.999888
3.7	0.999892	0.999896	0.999900	0.999904	0.999908	0.999912	0.999915	0.999918	0.999922	0.999925
3.8	0.999928	0.999930	0.999933	0.999936	0.999938	0.999941	0.999943	0.999946	0.999948	0.999950
3.9	0.999952	0.999954	0.999956	0.999958	0.999959	0.999961	0.999963	0.999964	0.999966	0.999967
4.0	0.999968	0.999970	0.999971	0.999972	0.999973	0.999974	0.999975	0.999976	0.999977	0.999978

<sup>&</sup>lt;sup>1</sup>Estes valores foram obtidos usando o *Excel*.

**Tabela 2:** Valores percentuais da Distribuição t de Student com n graus de liberdade  $(t_{(n)})$ .

$n \setminus q$	0.6	0.7	0.8	0.9	0.95	0.975	0.99	0.995	0.999	0.9995
1	0.325	0.727	1.376	3.078	6.314	12.706	31.821	63.656	318.289	636.578
2	0.289	0.617	1.061	1.886	2.920	4.303	6.965	9.925	22.328	31.600
3	0.277	0.584	0.978	1.638	2.353	3.182	4.541	5.841	10.214	12.924
4	0.271	0.569	0.941	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	0.267	0.559	0.920	1.476	2.015	2.571	3.365	4.032	5.894	6.869
6	0.265	0.553	0.906	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	0.263	0.549	0.896	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	0.262	0.546	0.889	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	0.261	0.543	0.883	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	0.260	0.542	0.879	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	0.260	0.540	0.876	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	0.259	0.539	0.873	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	0.259	0.538	0.870	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	0.258	0.537	0.868	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	0.258	0.536	0.866	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	0.258	0.535	0.865	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	0.257	0.534	0.863	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	0.257	0.534	0.862	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	0.257	0.533	0.861	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	0.257	0.533	0.860	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	0.257	0.532	0.859	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	0.256	0.532	0.858	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	0.256	0.532	0.858	1.319	1.714	2.069	2.500	2.807	3.485	3.768
24	0.256	0.531	0.857	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	0.256	0.531	0.856	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	0.256	0.531	0.856	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	0.256	0.531	0.855	1.314	1.703	2.052	2.473	2.771	3.421	3.689
28	0.256	0.530	0.855	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	0.256	0.530	0.854	1.311	1.699	2.045	2.462	2.756	3.396	3.660
30	0.256	0.530	0.854	1.310	1.697	2.042	2.457	2.750	3.385	3.646
40	0.255	0.529	0.851	1.303	1.684	2.021	2.423	2.704	3.307	3.551
45	0.255	0.528	0.850	1.301	1.679	2.014	2.412	2.690	3.281	3.520
50	0.255	0.528	0.849	1.299	1.676	2.009	2.403	2.678	3.261	3.496
60	0.254	0.527	0.848	1.296	1.671	2.000	2.390	2.660	3.232	3.460
70	0.254	0.527	0.847	1.294	1.667	1.994	2.381	2.648	3.211	3.435
80	0.254	0.526	0.846	1.292	1.664	1.990	2.374	2.639	3.195	3.416
90	0.254	0.526	0.846	1.291	1.662	1.987	2.368	2.632	3.183	3.402
100	0.254	0.526	0.845	1.290	1.660	1.984	2.364	2.626	3.174	3.390
120	0.254	0.526	0.845	1.289	1.658	1.980	2.358	2.617	3.160	3.373
150	0.254	0.526	0.844	1.287	1.655	1.976	2.351	2.609	3.145	3.357
∞	0.253	0.524	0.842	1.282	1.645	1.960	2.327	2.576	3.091	3.291

Nota:  $P(t_{(10)} \le 0.879) = 0.8$  para n = 10 e q = 0.8.

<sup>&</sup>lt;sup>2</sup>Estes valores foram obtidos usando o *Excel*.

**Tabela 3:** Valores percentuais da Distribuição Qui-quadrado com n graus de liberdade  $(\chi^2_{(n)})$ .

$n \setminus q$	0.005	0.01	0.025	0.05	0.2	0.5	0.8	0.95	0.975	0.99	0.995
1	0.000039	0.00016	0.001	0.004	0.064	0.455	1.642	3.841	5.024	6.635	7.879
2	0.010	0.020	0.051	0.103	0.446	1.386	3.219	5.991	7.378	9.210	10.597
3	0.072	0.115	0.216	0.352	1.005	2.366	4.642	7.815	9.348	11.345	12.838
4	0.207	0.297	0.484	0.711	1.649	3.357	5.989	9.488	11.143	13.277	14.860
5	0.412	0.554	0.831	1.145	2.343	4.351	7.289	11.070	12.832	15.086	16.750
6	0.676	0.872	1.237	1.635	3.070	5.348	8.558	12.592	14.449	16.812	18.548
7	0.989	1.239	1.690	2.167	3.822	6.346	9.803	14.067	16.013	18.475	20.278
8	1.344	1.647	2.180	2.733	4.594	7.344	11.030	15.507	17.535	20.090	21.955
9	1.735	2.088	2.700	3.325	5.380	8.343	12.242	16.919	19.023	21.666	23.589
10	2.156	2.558	3.247	3.940	6.179	9.342	13.442	18.307	20.483	23.209	25.188
11	2.603	3.053	3.816	4.575	6.989	10.341	14.631	19.675	21.920	24.725	26.757
12	3.074	3.571	4.404	5.226	7.807	11.340	15.812	21.026	23.337	26.217	28.300
13	3.565	4.107	5.009	5.892	8.634	12.340	16.985	22.362	24.736	27.688	29.819
14	4.075	4.660	5.629	6.571	9.467	13.339	18.151	23.685	26.119	29.141	31.319
15	4.601	5.229	6.262	7.261	10.307	14.339	19.311	24.996	27.488	30.578	32.801
16	5.142	5.812	6.908	7.962	11.152	15.338	20.465	26.296	28.845	32.000	34.267
17	5.697	6.408	7.564	8.672	12.002	16.338	21.615	27.587	30.191	33.409	35.718
18	6.265	7.015	8.231	9.390	12.857	17.338	22.760	28.869	31.526	34.805	37.156
19	6.844	7.633	8.907	10.117	13.716	18.338	23.900	30.144	32.852	36.191	38.582
20	7.434	8.260	9.591	10.851	14.578	19.337	25.038	31.410	34.170	37.566	39.997
21	8.034	8.897	10.283	11.591	15.445	20.337	26.171	32.671	35.479	38.932	41.401
22	8.643	9.542	10.982	12.338	16.314	21.337	27.301	33.924	36.781	40.289	42.796
23	9.260	10.196	11.689	13.091	17.187	22.337	28.429	35.172	38.076	41.638	44.181
24	9.886	10.856	12.401	13.848	18.062	23.337	29.553	36.415	39.364	42.980	45.558
25	10.520	11.524	13.120	14.611	18.940	24.337	30.675	37.652	40.646	44.314	46.928
26	11.160	12.198	13.844	15.379	19.820	25.336	31.795	38.885	41.923	45.642	48.290
27	11.808	12.878	14.573	16.151	20.703	26.336	32.912	40.113	43.195	46.963	49.645
28	12.461	13.565	15.308	16.928	21.588	27.336	34.027	41.337	44.461	48.278	50.994
29	13.121	14.256	16.047	17.708	22.475	28.336	35.139	42.557	45.722	49.588	52.335
30	13.787	14.953	16.791	18.493	23.364	29.336	36.250	43.773	46.979	50.892	53.672
31	14.458	15.655	17.539	19.281	24.255	30.336	37.359	44.985	48.232	52.191	55.002
32	15.134	16.362	18.291	20.072	25.148	31.336	38.466	46.194	49.480	53.486	56.328
33	15.815	17.073	19.047	20.867	26.042	32.336	39.572	47.400	50.725	54.775	57.648
34	16.501	17.789	19.806	21.664	26.938	33.336	40.676	48.602	51.966	56.061	58.964
35	17.192	18.509	20.569	22.465	27.836	34.336	41.778	49.802	53.203	57.342	60.275
36	17.887	19.233	21.336	23.269	28.735	35.336	42.879	50.998	54.437	58.619	61.581
37	18.586	19.960	22.106	24.075	29.635	36.336	43.978	52.192	55.668	59.893	62.883
38	19.289	20.691	22.878	24.884	30.537	37.335	45.076	53.384	56.895	61.162	64.181
39	19.996	21.426	23.654	25.695	31.441	38.335	46.173	54.572	58.120	62.428	65.475
40	20.71	22.16	24.43	26.51	32.34	39.34	47.27	55.76	59.34	63.69	66.77
50	27.99	29.71	32.36	34.76	41.45	49.33	58.16	67.50	71.42	76.15	79.49
60	35.53	37.48	40.48	43.19	50.64	59.33	68.97	79.08	83.30	88.38	91.95
70	43.28	45.44	48.76	51.74	59.90	69.33	79.71	90.53	95.02	100.43	104.21
80	51.17	53.54	57.15	60.39	69.21	79.33	90.41	101.88	106.63	112.33	116.32
90	59.20	61.75	65.65	69.13	78.56	89.33	101.05	113.15	118.14	124.12	128.30
100	67.33	70.06	74.22	77.93	87.95	99.33	111.67	124.34	129.56	135.81	140.17
120	83.85	86.92	91.57	95.70	106.81	119.33	132.81	146.57	152.21	158.95	163.65
150	109.14	112.67	117.98	122.69	135.26	149.33	164.35	179.58	185.80	193.21	198.36
200	152.24	156.43	162.73	168.28	183.00	199.33	216.61	233.99	241.06	249.45	255.26

Nota:  $P(\chi^2_{(10)} \le 20.483) = 0.975$  para n = 10 e q = 0.975.

<sup>&</sup>lt;sup>3</sup>Estes valores foram obtidos usando o *Excel*.

**Tabela 4:** Valores percentuais da Distribuição F de Snedcor com n e m graus de liberdade e probabilidade q=0.95  $(F_{(n,m)})$ .

$m \setminus n$	1	2	3	4	5	6	7	8	9	10	20	40	120	∞
1	161	199	216	225	230	234	237	239	241	242	248	251	253	254
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40	19.45	19.47	19.49	19.50
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79	8.66	8.59	8.55	8.53
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00	5.96	5.80	5.72	5.66	5.63
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.74	4.56	4.46	4.40	4.37
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	3.87	3.77	3.70	3.67
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64	3.44	3.34	3.27	3.23
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35	3.15	3.04	2.97	2.93
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18	3.14	2.94	2.83	2.75	2.71
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02	2.98	2.77	2.66	2.58	2.54
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90	2.85	2.65	2.53	2.45	2.41
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80	2.75	2.54	2.43	2.34	2.30
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71	2.67	2.46	2.34	2.25	2.21
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65	2.60	2.39	2.27	2.18	2.13
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59	2.54	2.33	2.20	2.11	2.07
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54	2.49	2.28	2.15	2.06	2.01
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49	2.45	2.23	2.10	2.01	1.96
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46	2.41	2.19	2.06	1.97	1.92
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42	2.38	2.16	2.03	1.93	1.88
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35	2.12	1.99	1.90	1.84
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37	2.32	2.10	1.96	1.87	1.81
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34	2.30	2.07	1.94	1.84	1.78
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32	2.27	2.05	1.91	1.81	1.76
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30	2.25	2.03	1.89	1.79	1.73
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28	2.24	2.01	1.87	1.77	1.71
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27	2.22	1.99	1.85	1.75	1.69
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25	2.20	1.97	1.84	1.73	1.67
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24	2.19	1.96	1.82	1.71	1.65
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22	2.18	1.94	1.81	1.70	1.64
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16	1.93	1.79	1.68	1.62
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12	2.08	1.84	1.69	1.58	1.51
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04	1.99	1.75	1.59	1.47	1.39
120	3.92	3.07	2.68	2.45	2.29	2.18	2.09	2.02	1.96	1.91	1.66	1.50	1.35	1.26
∞	3.84	3.00	2.61	2.37	2.21	2.10	2.01	1.94	1.88	1.83	1.57	1.40	1.22	1.03

Nota:  $P(F_{(2,10)} \le 4.10) = 0.95$  para n = 2 e m = 10.

$$f_{(n,m;p)} = \frac{1}{f_{(m,n;1-p)}}$$

<sup>&</sup>lt;sup>4</sup>Estes valores foram obtidos usando o *Excel*.

**Tabela 5:** Valores percentuais da Distribuição F de Snedcor com n e m graus de liberdade e probabilidade q=0.975  $(F_{(n,m)}).^5$ 

$m \setminus n$	1	2	3	4	5	6	7	8	9	10	20	40	120	∞
1	648	799	864	900	922	937	948	957	963	969	993	1006	1014	1018
2	38.51	39.00	39.17	39.25	39.30	39.33	39.36	39.37	39.39	39.40	39.45	39.47	39.49	39.50
3	17.44	16.04	15.44	15.10	14.88	14.73	14.62	14.54	14.47	14.42	14.17	14.04	13.95	13.90
4	12.22	10.65	9.98	9.60	9.36	9.20	9.07	8.98	8.90	8.84	8.56	8.41	8.31	8.26
5	10.01	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.68	6.62	6.33	6.18	6.07	6.02
6	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.52	5.46	5.17	5.01	4.90	4.85
7	8.07	6.54	5.89	5.52	5.29	5.12	4.99	4.90	4.82	4.76	4.47	4.31	4.20	4.14
8	7.57	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.36	4.30	4.00	3.84	3.73	3.67
9	7.21	5.71	5.08	4.72	4.48	4.32	4.20	4.10	4.03	3.96	3.67	3.51	3.39	3.33
10	6.94	5.46	4.83	4.47	4.24	4.07	3.95	3.85	3.78	3.72	3.42	3.26	3.14	3.08
11	6.72	5.26	4.63	4.28	4.04	3.88	3.76	3.66	3.59	3.53	3.23	3.06	2.94	2.88
12	6.55	5.10	4.47	4.12	3.89	3.73	3.61	3.51	3.44	3.37	3.07	2.91	2.79	2.73
13	6.41	4.97	4.35	4.00	3.77	3.60	3.48	3.39	3.31	3.25	2.95	2.78	2.66	2.60
14	6.30	4.86	4.24	3.89	3.66	3.50	3.38	3.29	3.21	3.15	2.84	2.67	2.55	2.49
15	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.12	3.06	2.76	2.59	2.46	2.40
16	6.12	4.69	4.08	3.73	3.50	3.34	3.22	3.12	3.05	2.99	2.68	2.51	2.38	2.32
17	6.04	4.62	4.01	3.66	3.44	3.28	3.16	3.06	2.98	2.92	2.62	2.44	2.32	2.25
18	5.98	4.56	3.95	3.61	3.38	3.22	3.10	3.01	2.93	2.87	2.56	2.38	2.26	2.19
19	5.92	4.51	3.90	3.56	3.33	3.17	3.05	2.96	2.88	2.82	2.51	2.33	2.20	2.13
20	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.84	2.77	2.46	2.29	2.16	2.09
21	5.83	4.42	3.82	3.48	3.25	3.09	2.97	2.87	2.80	2.73	2.42	2.25	2.11	2.04
22	5.79	4.38	3.78	3.44	3.22	3.05	2.93	2.84	2.76	2.70	2.39	2.21	2.08	2.00
23	5.75	4.35	3.75	3.41	3.18	3.02	2.90	2.81	2.73	2.67	2.36	2.18	2.04	1.97
24	5.72	4.32	3.72	3.38	3.15	2.99	2.87	2.78	2.70	2.64	2.33	2.15	2.01	1.94
25	5.69	4.29	3.69	3.35	3.13	2.97	2.85	2.75	2.68	2.61	2.30	2.12	1.98	1.91
26	5.66	4.27	3.67	3.33	3.10	2.94	2.82	2.73	2.65	2.59	2.28	2.09	1.95	1.88
27	5.63	4.24	3.65	3.31	3.08	2.92	2.80	2.71	2.63	2.57	2.25	2.07	1.93	1.85
28	5.61	4.22	3.63	3.29	3.06	2.90	2.78	2.69	2.61	2.55	2.23	2.05	1.91	1.83
29	5.59	4.20	3.61	3.27	3.04	2.88	2.76	2.67	2.59	2.53	2.21	2.03	1.89	1.81
30	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.57	2.51	2.20	2.01	1.87	1.79
40	5.42	4.05	3.46	3.13	2.90	2.74	2.62	2.53	2.45	2.39	2.07	1.88	1.72	1.64
60	5.29	3.93	3.34	3.01	2.79	2.63	2.51	2.41	2.33	2.27	1.94	1.74	1.58	1.48
120	5.15	3.80	3.23	2.89	2.67	2.52	2.39	2.30	2.22	2.16	1.82	1.61	1.43	1.31
∞	5.03	3.69	3.12	2.79	2.57	2.41	2.29	2.19	2.11	2.05	1.71	1.49	1.27	1.04

Nota:  $P(F_{(7,3)} \le 14.62) = 0.975$  para n = 7 e m = 3.

$$f_{(n,m;p)} = \frac{1}{f_{(m,n;1-p)}}$$

<sup>&</sup>lt;sup>5</sup>Estes valores foram obtidos usando o *Excel*.

**Tabela 6:** Valores percentuais da Distribuição F de Snedcor com n e m graus de liberdade e probabilidade q=0.99  $(F_{(n,m)})$ .

$m \setminus n$	1	2	3	4	5	6	7	8	9	10	20	40	120	∞
1	4052	4999	5404	5624	5764	5859	5928	5981	6022	6056	6209	6286	6340	6366
2	98.50	99.00	99.16	99.25	99.30	99.33	99.36	99.38	99.39	99.40	99.45	99.48	99.49	99.50
3	34.12	30.82	29.46	28.71	28.24	27.91	27.67	27.49	27.34	27.23	26.69	26.41	26.22	26.13
4	21.20	18.00	16.69	15.98	15.52	15.21	14.98	14.80	14.66	14.55	14.02	13.75	13.56	13.46
5	16.26	13.27	12.06	11.39	10.97	10.67	10.46	10.29	10.16	10.05	9.55	9.29	9.11	9.02
6	13.75	10.92	9.78	9.15	8.75	8.47	8.26	8.10	7.98	7.87	7.40	7.14	6.97	6.88
7	12.25	9.55	8.45	7.85	7.46	7.19	6.99	6.84	6.72	6.62	6.16	5.91	5.74	5.65
8	11.26	8.65	7.59	7.01	6.63	6.37	6.18	6.03	5.91	5.81	5.36	5.12	4.95	4.86
9	10.56	8.02	6.99	6.42	6.06	5.80	5.61	5.47	5.35	5.26	4.81	4.57	4.40	4.31
10	10.04	7.56	6.55	5.99	5.64	5.39	5.20	5.06	4.94	4.85	4.41	4.17	4.00	3.91
11	9.65	7.21	6.22	5.67	5.32	5.07	4.89	4.74	4.63	4.54	4.10	3.86	3.69	3.60
12	9.33	6.93	5.95	5.41	5.06	4.82	4.64	4.50	4.39	4.30	3.86	3.62	3.45	3.36
13	9.07	6.70	5.74	5.21	4.86	4.62	4.44	4.30	4.19	4.10	3.66	3.43	3.25	3.17
14	8.86	6.51	5.56	5.04	4.69	4.46	4.28	4.14	4.03	3.94	3.51	3.27	3.09	3.01
15	8.68	6.36	5.42	4.89	4.56	4.32	4.14	4.00	3.89	3.80	3.37	3.13	2.96	2.87
16	8.53	6.23	5.29	4.77	4.44	4.20	4.03	3.89	3.78	3.69	3.26	3.02	2.84	2.75
17	8.40	6.11	5.19	4.67	4.34	4.10	3.93	3.79	3.68	3.59	3.16	2.92	2.75	2.65
18	8.29	6.01	5.09	4.58	4.25	4.01	3.84	3.71	3.60	3.51	3.08	2.84	2.66	2.57
19	8.18	5.93	5.01	4.50	4.17	3.94	3.77	3.63	3.52	3.43	3.00	2.76	2.58	2.49
20	8.10	5.85	4.94	4.43	4.10	3.87	3.70	3.56	3.46	3.37	2.94	2.69	2.52	2.42
21	8.02	5.78	4.87	4.37	4.04	3.81	3.64	3.51	3.40	3.31	2.88	2.64	2.46	2.36
22	7.95	5.72	4.82	4.31	3.99	3.76	3.59	3.45	3.35	3.26	2.83	2.58	2.40	2.31
23	7.88	5.66	4.76	4.26	3.94	3.71	3.54	3.41	3.30	3.21	2.78	2.54	2.35	2.26
24	7.82	5.61	4.72	4.22	3.90	3.67	3.50	3.36	3.26	3.17	2.74	2.49	2.31	2.21
25	7.77	5.57	4.68	4.18	3.85	3.63	3.46	3.32	3.22	3.13	2.70	2.45	2.27	2.17
26	7.72	5.53	4.64	4.14	3.82	3.59	3.42	3.29	3.18	3.09	2.66	2.42	2.23	2.13
27	7.68	5.49	4.60	4.11	3.78	3.56	3.39	3.26	3.15	3.06	2.63	2.38	2.20	2.10
28	7.64	5.45	4.57	4.07	3.75	3.53	3.36	3.23	3.12	3.03	2.60	2.35	2.17	2.07
29	7.60	5.42	4.54	4.04	3.73	3.50	3.33	3.20	3.09	3.00	2.57	2.33	2.14	2.04
30	7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	3.07	2.98	2.55	2.30	2.11	2.01
40	7.31	5.18	4.31	3.83	3.51	3.29	3.12	2.99	2.89	2.80	2.37	2.11	1.92	1.81
60	7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.72	2.63	2.20	1.94	1.73	1.60
120	6.85	4.79	3.95	3.48	3.17	2.96	2.79	2.66	2.56	2.47	2.03	1.76	1.53	1.38
∞	6.64	4.61	3.78	3.32	3.02	2.80	2.64	2.51	2.41	2.32	1.88	1.59	1.33	1.05

Nota:  $P(F_{(5,22)} \le 3.99) = 0.99$  para n = 5 e m = 22.

$$f_{(n,m;p)} = \frac{1}{f_{(m,n;1-p)}}$$

<sup>&</sup>lt;sup>6</sup>Estes valores foram obtidos usando o *Excel*.

**Tabela 7:** Função de Distribuição da Binomial (n,p) - Parte I.<sup>7</sup>

n	$x \setminus p$	0.01	0.03	0.05	0.08	0.10	0.15	0.20	0.25	0.30	0.40	0.50
1	0	0.9900	0.9700	0.9500	0.9200	0.9000	0.8500	0.8000	0.7500	0.7000	0.6000	0.5000
	1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0	0.9801	0.9409	0.9025	0.8464	0.8100	0.7225	0.6400	0.5625	0.4900	0.3600	0.2500
	1	0.9999	0.9991	0.9975	0.9936	0.9900	0.9775	0.9600	0.9375	0.9100	0.8400	0.7500
	2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5	0	0.9510	0.8587	0.7738	0.6591	0.5905	0.4437	0.3277	0.2373	0.1681	0.0778	0.0313
	1	0.9990	0.9915	0.9774	0.9456	0.9185	0.8352	0.7373	0.6328	0.5282	0.3370	0.1875
	2	1.0000	0.9997	0.9988	0.9955	0.9914	0.9734	0.9421	0.8965	0.8369	0.6826	0.5000
	3	1.0000	1.0000	1.0000	0.9998	0.9995	0.9978	0.9933	0.9844	0.9692	0.9130	0.8125
	4 5	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	0.9999 1.0000	0.9997 1.0000	0.9990 1.0000	0.9976 1.0000	0.9898 1.0000	0.9688 1.0000
8	0	0.9227	0.7837	0.6634	0.5132	0.4305	0.2725	0.1678	0.1001	0.0576	0.0168	0.0039
O	1	0.9973	0.9777	0.9428	0.8702	0.4303	0.6572	0.5033	0.3671	0.2553	0.1064	0.0352
	2	0.9999	0.9987	0.9942	0.9789	0.9619	0.8948	0.7969	0.6785	0.5518	0.3154	0.1445
	3	1.0000	0.9999	0.9996	0.9978	0.9950	0.9786	0.9437	0.8862	0.8059	0.5941	0.3633
	4	1.0000	1.0000	1.0000	0.9999	0.9996	0.9971	0.9896	0.9727	0.9420	0.8263	0.6367
	5	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9988	0.9958	0.9887	0.9502	0.8555
	6	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9996	0.9987	0.9915	0.9648
	7	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9993	0.9961
	8	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10	0	0.9044	0.7374	0.5987	0.4344	0.3487	0.1969	0.1074	0.0563	0.0282	0.0060	0.0010
	1	0.9957	0.9655	0.9139	0.8121	0.7361	0.5443	0.3758	0.2440	0.1493	0.0464	0.0107
	2	0.9999	0.9972	0.9885	0.9599	0.9298	0.8202	0.6778	0.5256	0.3828	0.1673	0.0547
	3	1.0000	0.9999	0.9990	0.9942	0.9872	0.9500	0.8791	0.7759	0.6496	0.3823	0.1719
	4	1.0000	1.0000	0.9999	0.9994	0.9984	0.9901	0.9672	0.9219	0.8497	0.6331	0.3770
	5 6	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	0.9999 1.0000	0.9986 0.9999	0.9936 0.9991	0.9803 0.9965	0.9527 0.9894	0.8338 0.9452	0.6230 0.8281
	7	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9991	0.9996	0.9894	0.9432	0.9453
	8	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9983	0.9893
	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9990
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0	0.8864	0.6938	0.5404	0.3677	0.2824	0.1422	0.0687	0.0317	0.0138	0.0022	0.0002
	1	0.9938	0.9514	0.8816	0.7513	0.6590	0.4435	0.2749	0.1584	0.0850	0.0196	0.0032
	2	0.9998	0.9952	0.9804	0.9348	0.8891	0.7358	0.5583	0.3907	0.2528	0.0834	0.0193
	3	1.0000	0.9997	0.9978	0.9880	0.9744	0.9078	0.7946	0.6488	0.4925	0.2253	0.0730
	4	1.0000	1.0000	0.9998	0.9984	0.9957	0.9761	0.9274	0.8424	0.7237	0.4382	0.1938
	5	1.0000	1.0000	1.0000	0.9998	0.9995	0.9954	0.9806	0.9456	0.8822	0.6652	0.3872
	6	1.0000	1.0000	1.0000	1.0000	0.9999	0.9993	0.9961	0.9857	0.9614	0.8418	0.6128
	7 8	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	0.9999 1.0000	0.9994 0.9999	0.9972 0.9996	0.9905 0.9983	0.9427 0.9847	0.8062 0.9270
	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9847	0.9270
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9997	0.9968
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13	0	0.8775	0.6730	0.5133	0.3383	0.2542	0.1209	0.0550	0.0238	0.0097	0.0013	0.0001
	1	0.9928	0.9436	0.8646	0.7206	0.6213	0.3983	0.2336	0.1267	0.0637	0.0126	0.0017
	2	0.9997	0.9938	0.9755	0.9201	0.8661	0.6920	0.5017	0.3326	0.2025	0.0579	0.0112
	3	1.0000	0.9995	0.9969	0.9837	0.9658	0.8820	0.7473	0.5843	0.4206	0.1686	0.0461
	4	1.0000	1.0000	0.9997	0.9976	0.9935	0.9658	0.9009	0.7940	0.6543	0.3530	0.1334
	5	1.0000	1.0000	1.0000	0.9997	0.9991	0.9925	0.9700	0.9198	0.8346	0.5744	0.2905
	6	1.0000	1.0000	1.0000	1.0000	0.9999	0.9987	0.9930	0.9757	0.9376	0.7712	0.5000
	7	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9988	0.9944	0.9818	0.9023	0.7095
	8 9	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	0.9998 1.0000	0.9990 0.9999	0.9960 0.9993	0.9679 0.9922	0.8666 0.9539
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9993	0.9922	0.9339
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9883
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
15	0	0.8601	0.6333	0.4633	0.2863	0.2059	0.0874	0.0352	0.0134	0.0047	0.0005	0.0000
	1	0.9904	0.9270	0.8290	0.6597	0.5490	0.3186	0.1671	0.0802	0.0353	0.0052	0.0005
	2	0.9996	0.9906	0.9638	0.8870	0.8159	0.6042	0.3980	0.2361	0.1268	0.0271	0.0037
							0.8227	0.6482	0.4613	0.2969	0.0905	0.0176
	3	1.0000	0.9992	0.9945	0.9727	0.9444	0.6227	0.0462	0.4013	0.2909	0.0903	0.0170

 $<sup>^{7}</sup>$ Estes valores foram obtidos usando o *Excel*.

**Tabela 8:** Função de Distribuição da Binomial (n,p) - Parte II.<sup>8</sup>

12	$x \setminus p$	0.01	0.03	0.05	0.08	0.10	0.15	0.20	0.25	0.30	0.40	0.50
n												
15	5	1.0000	1.0000	0.9999	0.9993	0.9978	0.9832	0.9389	0.8516	0.7216	0.4032	0.1509
	6	1.0000	1.0000	1.0000	0.9999	0.9997	0.9964	0.9819	0.9434	0.8689	0.6098	0.3036
	7	1.0000	1.0000	1.0000	1.0000	1.0000	0.9994	0.9958	0.9827	0.9500	0.7869	0.5000
	8	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9992	0.9958	0.9848	0.9050	0.6964
	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9992	0.9963	0.9662	0.8491
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9993	0.9907	0.9408
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9981	0.9824
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9997	0.9963
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9995
	14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
17	0	0.8429	0.5958	0.4181	0.2423	0.1668	0.0631	0.0225	0.0075	0.0023	0.0002	0.0000
	1	0.9877	0.9091	0.7922	0.6005	0.4818	0.2525	0.1182	0.0501	0.0193	0.0021	0.0001
	2	0.9994	0.9866	0.9497	0.8497	0.7618	0.5198	0.3096	0.1637	0.0774	0.0123	0.0012
	3	1.0000	0.9986	0.9912	0.9581	0.9174	0.7556	0.5489	0.3530	0.2019	0.0464	0.0064
	4	1.0000	0.9999	0.9988	0.9911	0.9779	0.9013	0.7582	0.5739	0.3887	0.1260	0.0245
	5	1.0000	1.0000	0.9999	0.9985	0.9953	0.9681	0.8943	0.7653	0.5968	0.2639	0.0717
	6	1.0000	1.0000	1.0000	0.9998	0.9992	0.9917	0.9623	0.8929	0.7752	0.4478	0.1662
	7	1.0000	1.0000	1.0000	1.0000	0.9999	0.9983	0.9891	0.9598	0.8954	0.6405	0.3145
	8							0.9974				
		1.0000	1.0000	1.0000	1.0000	1.0000	0.9997		0.9876	0.9597	0.8011	0.5000
	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9995	0.9969	0.9873	0.9081	0.6855
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9994	0.9968	0.9652	0.8338
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9993	0.9894	0.9283
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9975	0.9755
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9995	0.9936
	14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9988
	15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
	16	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18	0	0.8345	0.5780	0.3972	0.2229	0.1501	0.0536	0.0180	0.0056	0.0016	0.0001	0.0000
10	1									0.0010		
		0.9862	0.8997	0.7735	0.5719	0.4503	0.2241	0.0991	0.0395		0.0013	0.0001
	2	0.9993	0.9843	0.9419	0.8298	0.7338	0.4797	0.2713	0.1353	0.0600	0.0082	0.0007
	3	1.0000	0.9982	0.9891	0.9494	0.9018	0.7202	0.5010	0.3057	0.1646	0.0328	0.0038
	4	1.0000	0.9998	0.9985	0.9884	0.9718	0.8794	0.7164	0.5187	0.3327	0.0942	0.0154
	5	1.0000	1.0000	0.9998	0.9979	0.9936	0.9581	0.8671	0.7175	0.5344	0.2088	0.0481
	6	1.0000	1.0000	1.0000	0.9997	0.9988	0.9882	0.9487	0.8610	0.7217	0.3743	0.1189
	7	1.0000	1.0000	1.0000	1.0000	0.9998	0.9973	0.9837	0.9431	0.8593	0.5634	0.2403
	8	1.0000	1.0000	1.0000	1.0000	1.0000	0.9995	0.9957	0.9807	0.9404	0.7368	0.4073
	9	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9991	0.9946	0.9790	0.8653	0.5927
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9988	0.9939	0.9424	0.7597
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9986	0.9797	0.8811
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9997	0.9942	0.9519
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9987	0.9846
	14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			0.9998	0.9962
									1.0000	1.0000		
	15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9993
	16	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999
	17	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
20	0	0.8179	0.5438	0.3585	0.1887	0.1216	0.0388	0.0115	0.0032	0.0008	0.0000	0.0000
	1	0.9831	0.8802	0.7358	0.5169	0.3917	0.1756	0.0692	0.0243	0.0076	0.0005	0.0000
	2	0.9990	0.9790	0.9245	0.7879	0.6769	0.4049	0.2061	0.0913	0.0355	0.0036	0.0002
	3	1.0000	0.9973	0.9841	0.9294	0.8670	0.6477	0.4114	0.2252	0.1071	0.0160	0.0013
	4	1.0000	0.9997	0.9974	0.9817	0.9568	0.8298	0.6296	0.4148	0.2375	0.0510	0.0059
	5	1.0000	1.0000	0.9997	0.9962	0.9887	0.9327	0.8042	0.6172	0.4164	0.1256	0.0207
	6	1.0000	1.0000	1.0000	0.9994	0.9976	0.9781	0.9133	0.7858	0.6080	0.2500	0.0577
	7	1.0000	1.0000	1.0000	0.9999	0.9996	0.9941	0.9679	0.8982	0.7723	0.4159	
												0.1316
	8	1.0000	1.0000	1.0000	1.0000	0.9999	0.9987	0.9900	0.9591	0.8867	0.5956	0.2517
	9	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9974	0.9861	0.9520	0.7553	0.4119
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9994	0.9961	0.9829	0.8725	0.5881
	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9991	0.9949	0.9435	0.7483
	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9987	0.9790	0.8684
	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9997	0.9935	0.9423
	14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9984	0.9793
	15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9997	0.9941
	16	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9987
	17	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998
	18	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

<sup>&</sup>lt;sup>8</sup>Estes valores foram obtidos usando o *Excel*.