

# TABELAS DE PROBABILIDADES E ESTATÍSTICA

Tabela 1: Função de distribuição Binomial

$$F_X(x) = \sum_{k=0}^x \binom{n}{k} p^k (1-p)^{n-k}$$

n	x \ p	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50
1	0	0.9900	0.9800	0.9700	0.9600	0.9500	0.9400	0.9300	0.9200	0.9100	0.9000	0.8500	0.8000	0.7500	0.7000	0.6500	0.6000	0.5500	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0	0.9801	0.9604	0.9409	0.9216	0.9025	0.8836	0.8649	0.8464	0.8281	0.8100	0.7225	0.6400	0.5625	0.4900	0.4225	0.3600	0.3025	0.2500
	1	0.9999	0.9996	0.9991	0.9984	0.9975	0.9964	0.9951	0.9936	0.9919	0.9900	0.9775	0.9600	0.9375	0.9100	0.8775	0.8400	0.7975	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	0	0.9703	0.9412	0.9127	0.8847	0.8574	0.8306	0.8044	0.7787	0.7536	0.7290	0.6141	0.5120	0.4219	0.3430	0.2746	0.2160	0.1664	0.1250
	1	0.9997	0.9988	0.9974	0.9953	0.9928	0.9896	0.9860	0.9818	0.9772	0.9720	0.9393	0.8960	0.8438	0.7840	0.7183	0.6480	0.5748	0.5000
	2	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998	0.9997	0.9995	0.9993	0.9990	0.9966	0.9920	0.9844	0.9730	0.9571	0.9360	0.9089	0.8750
	3				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0	0.9606	0.9224	0.8853	0.8493	0.8145	0.7807	0.7481	0.7164	0.6857	0.6561	0.5220	0.4096	0.3164	0.2401	0.1785	0.1296	0.0915	0.0625
	1	0.9994	0.9977	0.9948	0.9909	0.9860	0.9801	0.9733	0.9656	0.9570	0.9477	0.8905	0.8192	0.7383	0.6517	0.5630	0.4752	0.3910	0.3125
	2	1.0000	1.0000	0.9999	0.9998	0.9995	0.9992	0.9987	0.9981	0.9973	0.9963	0.9880	0.9728	0.9492	0.9163	0.8735	0.8208	0.7585	0.6875
	3			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9999	0.9995	0.9984	0.9961	0.9919	0.9850	0.9744	0.9590	0.9375
	4									1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5	0	0.9510	0.9039	0.8587	0.8154	0.7738	0.7339	0.6957	0.6591	0.6240	0.5905	0.4437	0.3277	0.2373	0.1681	0.1160	0.0778	0.0503	0.0313
	1	0.9990	0.9962	0.9915	0.9852	0.9774	0.9681	0.9575	0.9456	0.9326	0.9185	0.8352	0.7373	0.6328	0.5282	0.4284	0.3370	0.2562	0.1875
	2	1.0000	0.9999	0.9997	0.9994	0.9988	0.9980	0.9969	0.9955	0.9937	0.9914	0.9734	0.9421	0.8965	0.8369	0.7648	0.6826	0.5931	0.5000
	3		1.0000	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998	0.9997	0.9995	0.9978	0.9933	0.9844	0.9692	0.9460	0.9130	0.8688	0.8125
	4						1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9997	0.9990	0.9976	0.9947	0.9898	0.9815	0.9688
	5											1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6	0	0.9415	0.8858	0.8330	0.7828	0.7351	0.6899	0.6470	0.6064	0.5679	0.5314	0.3771	0.2621	0.1780	0.1176	0.0754	0.0467	0.0277	0.0156
	1	0.9985	0.9943	0.9875	0.9784	0.9672	0.9541	0.9392	0.9227	0.9048	0.8857	0.7765	0.6554	0.5339	0.4202	0.3191	0.2333	0.1636	0.1094
	2	1.0000	0.9998	0.9995	0.9988	0.9978	0.9962	0.9942	0.9915	0.9882	0.9842	0.9527	0.9011	0.8306	0.7443	0.6471	0.5443	0.4415	0.3438
	3		1.0000	1.0000	1.0000	0.9999	0.9998	0.9997	0.9995	0.9992	0.9987	0.9941	0.9830	0.9624	0.9295	0.8826	0.8208	0.7447	0.6563
	4					1.0000	1.0000	1.0000	1.0000	1.0000	0.9999	0.9996	0.9984	0.9954	0.9891	0.9777	0.9590	0.9308	0.8906
	5											1.0000	1.0000	0.9998	0.9993	0.9982	0.9959	0.9917	0.9844
	6													1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7	0	0.9321	0.8681	0.8080	0.7514	0.6983	0.6485	0.6017	0.5578	0.5168	0.4783	0.3206	0.2097	0.1335	0.0824	0.0490	0.0280	0.0152	0.0078
	1	0.9980	0.9921	0.9829	0.9706	0.9556	0.9382	0.9187	0.8974	0.8745	0.8503	0.7166	0.5767	0.4449	0.3294	0.2338	0.1586	0.1024	0.0625
	2	1.0000	0.9997	0.9991	0.9980	0.9962	0.9937	0.9903	0.9860	0.9807	0.9743	0.9262	0.8520	0.7564	0.6471	0.5323	0.4199	0.3164	0.2266
	3		1.0000	1.0000	0.9999	0.9998	0.9996	0.9993	0.9988	0.9982	0.9973	0.9879	0.9667	0.9294	0.8740	0.8002	0.7102	0.6083	0.5000
	4				1.0000	1.0000	1.0000	1.0000	0.9999	0.9999	0.9998	0.9988	0.9953	0.9871	0.9712	0.9444	0.9037	0.8471	0.7734
	5								1.0000	1.0000	1.0000	0.9999	0.9996	0.9987	0.9962	0.9910	0.9812	0.9643	0.9375
	6											1.0000	1.0000	0.9999	0.9998	0.9994	0.9984	0.9963	0.9922
	7													1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
8	0	0.9227	0.8508	0.7837	0.7214	0.6634	0.6096	0.5596	0.5132	0.4703	0.4305	0.2725	0.1678	0.1001	0.0576	0.0319	0.0168	0.0084	0.0039
	1	0.9973	0.9897	0.9777	0.9619	0.9428	0.9208	0.8965	0.8702	0.8423	0.8131	0.6572	0.5033	0.3671	0.2553	0.1691	0.1064	0.0632	0.0352
	2	0.9999	0.9996	0.9987	0.9969	0.9942	0.9904	0.9853	0.9789	0.9711	0.9619	0.8948	0.7969	0.6785	0.5518	0.4278	0.3154	0.2201	0.1445
	3	1.0000	1.0000	0.9999	0.9998	0.9996	0.9993	0.9987	0.9978	0.9966	0.9950	0.9786	0.9437	0.8862	0.8059	0.7064	0.5941	0.4770	0.3633
	4			1.0000	1.0000	1.0000	1.0000	0.9999	0.9999	0.9997	0.9996	0.9971	0.9896	0.9727	0.9420	0.8939	0.8263	0.7396	0.6367
	5							1.0000	1.0000	1.0000	0.9998	0.9988	0.9958	0.9887	0.9747	0.9502	0.9115	0.8555	
	6										1.0000	0.9999	0.9996	0.9987	0.9964	0.9915	0.9819	0.9648	
	7											1.0000	1.0000	0.9999	0.9998	0.9993	0.9983	0.9961	
	8													1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
9	0	0.9135	0.8337	0.7602	0.6925	0.6302	0.5730	0.5204	0.4722	0.4279	0.3874	0.2316	0.1342	0.0751	0.0404	0.0207	0.0101	0.0046	0.0020
	1	0.9966	0.9869	0.9718	0.9522	0.9288	0.9022	0.8729	0.8417	0.8088	0.7748	0.5995	0.4362	0.3003	0.1960	0.1211	0.0705	0.0385	0.0195
	2	0.9999	0.9994	0.9980	0.9955	0.9916	0.9862	0.9791	0.9702	0.9595	0.9470	0.8591	0.7382	0.6007	0.4628	0.3373	0.2318	0.1495	0.0898
	3	1.0000	1.0000	0.9999	0.9997	0.9994	0.9987	0.9977	0.9963	0.9943	0.9917	0.9661	0.9144	0.8343	0.7297	0.6089	0.4826	0.3614	0.2539
	4			1.0000	1.0000	1.0000	0.9999	0.9998	0.9997	0.9995	0.9991	0.9944	0.9804	0.9511	0.9012	0.8283	0.7334	0.6214	0.5000
	5						1.0000	1.0000	1.0000	1.0000	0.9999	0.9994	0.9969	0.9900	0.9747	0.9464	0.9006	0.8342	0.7461
	6										1.0000	1.0000	0.9997	0.9987	0.9957	0.9888	0.9750	0.9502	0.9102
	7											1.0000	0.9999	0.9996	0.9986	0.9962	0.9909	0.9805	
	8												1.0000	1.0000	0.9999	0.9997	0.9992	0.9980	
	9														1.0000	1.0000	1.0000	1.0000	1.0000
10	0	0.9044	0.8171	0.7374	0.6648	0.5987	0.5386	0.4840	0.4344	0.3894	0.3487	0.1969	0.1074	0.0563	0.0282	0.0135	0.0060	0.0025	0.0010
	1	0.9957	0.9838	0.9655	0.9418	0.9139	0.8824	0.8483	0.8121	0.7746	0.7361	0.5443	0.3758	0.2440	0.1493	0.0860	0.0464	0.0233	0.0107
	2	0.9999	0.9991	0.9972	0.9938	0.9885	0.9812	0.9717	0.9599	0.9460	0.9298	0.8202	0.6778	0.5256	0.3828	0.2616	0.1673	0.0996	0.0547
	3	1.0000	1.0000	0.9999	0.9996														

$n$	$x \setminus p$	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50			
11	0	0.8953	0.8007	0.7153	0.6382	0.5688	0.5063	0.4501	0.3996	0.3544	0.3138	0.1673	0.0859	0.0422	0.0198	0.0088	0.0036	0.0014	0.0005			
	1	0.9948	0.9805	0.9587	0.9308	0.8981	0.8618	0.8228	0.7819	0.7399	0.6974	0.4922	0.3221	0.1971	0.1130	0.0606	0.0302	0.0139	0.0059			
	2	0.9998	0.9988	0.9963	0.9917	0.9848	0.9752	0.9630	0.9481	0.9305	0.9104	0.7788	0.6174	0.4552	0.3127	0.2001	0.1189	0.0652	0.0327			
	3	1.0000	1.0000	0.9998	0.9993	0.9984	0.9970	0.9947	0.9915	0.9871	0.9815	0.9306	0.8389	0.7133	0.5696	0.4256	0.2963	0.1911	0.1133			
	4			1.0000	1.0000	0.9999	0.9997	0.9995	0.9990	0.9983	0.9972	0.9841	0.9496	0.8854	0.7897	0.6683	0.5328	0.3971	0.2744			
	5					1.0000	1.0000	1.0000	0.9999	0.9998	0.9997	0.9973	0.9883	0.9657	0.9218	0.8513	0.7535	0.6331	0.5000			
	6											1.0000	0.9997	0.9980	0.9924	0.9784	0.9499	0.9006	0.8262	0.7256		
	7												1.0000	0.9998	0.9988	0.9957	0.9878	0.9707	0.9390	0.8867		
	8													1.0000	0.9999	0.9994	0.9980	0.9941	0.9852	0.9673		
	9														1.0000	1.0000	0.9998	0.9993	0.9978	0.9941		
	10																1.0000	1.0000	0.9998	0.9995		
11																		1.0000	1.0000			
12	0	0.8864	0.7847	0.6938	0.6127	0.5404	0.4759	0.4186	0.3677	0.3225	0.2824	0.1422	0.0687	0.0317	0.0138	0.0057	0.0022	0.0008	0.0002			
	1	0.9938	0.9769	0.9514	0.9191	0.8816	0.8405	0.7967	0.7513	0.7052	0.6590	0.4435	0.2749	0.1584	0.0850	0.0424	0.0196	0.0083	0.0032			
	2	0.9998	0.9985	0.9952	0.9893	0.9804	0.9684	0.9532	0.9348	0.9134	0.8891	0.7358	0.5583	0.3907	0.2528	0.1513	0.0834	0.0421	0.0193			
	3	1.0000	0.9999	0.9997	0.9990	0.9978	0.9957	0.9925	0.9880	0.9820	0.9744	0.9078	0.7946	0.6488	0.4925	0.3467	0.2253	0.1345	0.0730			
	4		1.0000	1.0000	0.9999	0.9998	0.9996	0.9991	0.9984	0.9973	0.9957	0.9761	0.9274	0.8424	0.7237	0.5833	0.4382	0.3044	0.1938			
	5				1.0000	1.0000	1.0000	0.9999	0.9998	0.9997	0.9995	0.9954	0.9806	0.9456	0.8822	0.7873	0.6652	0.5269	0.3872			
	6								1.0000	1.0000	1.0000	0.9999	0.9993	0.9961	0.9857	0.9614	0.9154	0.8418	0.7393	0.6128		
	7											1.0000	0.9999	0.9994	0.9972	0.9905	0.9745	0.9427	0.8883	0.8062		
	8												1.0000	0.9999	0.9996	0.9983	0.9944	0.9847	0.9644	0.9270		
	9													1.0000	1.0000	0.9998	0.9992	0.9972	0.9921	0.9807		
	10															1.0000	0.9999	0.9997	0.9989	0.9968		
	11																1.0000	1.0000	0.9999	0.9998		
12																		1.0000	1.0000			
13	0	0.8775	0.7690	0.6730	0.5882	0.5133	0.4474	0.3893	0.3383	0.2935	0.2542	0.1209	0.0550	0.0238	0.0097	0.0037	0.0013	0.0004	0.0001			
	1	0.9928	0.9730	0.9436	0.9068	0.8646	0.8186	0.7702	0.7206	0.6707	0.6213	0.3983	0.2336	0.1267	0.0637	0.0296	0.0126	0.0049	0.0017			
	2	0.9997	0.9980	0.9938	0.9865	0.9755	0.9608	0.9422	0.9201	0.8946	0.8661	0.6920	0.5017	0.3326	0.2025	0.1132	0.0579	0.0269	0.0112			
	3	1.0000	0.9999	0.9995	0.9986	0.9969	0.9940	0.9897	0.9837	0.9758	0.9658	0.8820	0.7473	0.5843	0.4206	0.2783	0.1686	0.0929	0.0461			
	4		1.0000	1.0000	0.9999	0.9997	0.9993	0.9987	0.9976	0.9959	0.9935	0.9658	0.9009	0.7940	0.6543	0.5005	0.3530	0.2279	0.1334			
	5				1.0000	1.0000	0.9999	0.9999	0.9997	0.9995	0.9991	0.9925	0.9700	0.9198	0.8346	0.7159	0.5744	0.4268	0.2905			
	6							1.0000	1.0000	1.0000	0.9999	0.9999	0.9987	0.9930	0.9757	0.9376	0.8705	0.7712	0.6437	0.5000		
	7											1.0000	1.0000	0.9998	0.9988	0.9944	0.9818	0.9538	0.9023	0.8212	0.7095	
	8												1.0000	0.9998	0.9990	0.9960	0.9874	0.9679	0.9302	0.8666		
	9													1.0000	0.9999	0.9993	0.9975	0.9922	0.9797	0.9539		
	10															1.0000	0.9999	0.9997	0.9987	0.9959	0.9888	
	11																1.0000	1.0000	0.9999	0.9995	0.9983	
	12																	1.0000	1.0000	0.9999	0.9999	
13																		1.0000	1.0000	1.0000		
14	0	0.8687	0.7536	0.6528	0.5647	0.4877	0.4205	0.3620	0.3112	0.2670	0.2288	0.1028	0.0440	0.0178	0.0068	0.0024	0.0008	0.0002	0.0001			
	1	0.9916	0.9690	0.9355	0.8941	0.8470	0.7963	0.7436	0.6900	0.6368	0.5846	0.3567	0.1979	0.1010	0.0475	0.0205	0.0081	0.0029	0.0009			
	2	0.9997	0.9975	0.9923	0.9833	0.9699	0.9522	0.9302	0.9042	0.8745	0.8416	0.6479	0.4481	0.2811	0.1608	0.0839	0.0398	0.0170	0.0065			
	3	1.0000	0.9999	0.9994	0.9981	0.9958	0.9920	0.9864	0.9786	0.9685	0.9559	0.8535	0.6982	0.5213	0.3552	0.2205	0.1243	0.0632	0.0287			
	4		1.0000	1.0000	0.9998	0.9996	0.9990	0.9980	0.9965	0.9941	0.9908	0.9533	0.8702	0.7415	0.5842	0.4227	0.2793	0.1672	0.0898			
	5				1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9985	0.9885	0.9561	0.8883	0.7805	0.6405	0.4859	0.3373	0.2120			
	6							1.0000	1.0000	1.0000	0.9999	0.9998	0.9978	0.9884	0.9617	0.9067	0.8164	0.6925	0.5461	0.3953		
	7											1.0000	1.0000	0.9997	0.9976	0.9897	0.9685	0.9247	0.8499	0.7414	0.6047	
	8												1.0000	0.9996	0.9978	0.9917	0.9757	0.9417	0.8811	0.7880		
	9													1.0000	0.9997	0.9983	0.9940	0.9825	0.9574	0.9102		
	10															1.0000	0.9998	0.9989	0.9961	0.9886	0.9713	
	11																1.0000	0.9999	0.9994	0.9978	0.9935	
	12																	1.0000	0.9999	0.9997	0.9991	
	13																		1.0000	1.0000	0.9999	
14																			1.0000	1.0000		
15	0	0.8601	0.7386	0.6333	0.5421	0.4633	0.3953	0.3367	0.2863	0.2430	0.2059	0.0874	0.0352	0.0134	0.0047	0.0016	0.0005	0.0001	0.0000			
	1	0.9904	0.9647	0.9270	0.8809	0.8290	0.7738	0.7168	0.6597	0.6035	0.5490	0.3186	0.1671	0.0802	0.0353	0.0142	0.0052	0.0017	0.0005			
	2	0.9996	0.9970	0.9906	0.9797	0.9638	0.9429	0.9171	0.8870	0.8531	0.8159	0.6042	0.3980	0.2361	0.1268	0.0617	0.0271	0.0107	0.0037			
	3	1.0000	0.9998	0.9992	0.9976	0.9945	0.9896	0.9825	0.9727	0.9601	0.9444	0.8227	0.6482	0.4613	0.2969	0.1727	0.0905	0.0424	0.0176			
	4		1.0000	0.9999	0.9998	0.9994	0.9986	0.9972	0.9950	0.9918	0.9873	0.9383	0.8358	0.6865	0.5155	0.3519	0.2173	0.1204	0.0592			
	5				1.0000	1.0000	0.9999	0.9999	0.9997	0.9993	0.9987	0.9832	0.9389	0.8516	0.7216	0.5643	0.4032	0.2608	0.1509			
	6							1.0000	1.0000	1.0000	0.9999	0.9998	0.9997	0.9964	0.9819	0.9434	0.8689	0.7548	0.6098	0.4522	0.3036	
	7											1.0000	1.0000	0.9994	0.9958	0.9827	0.9500	0.8868	0.7869	0.6535	0.5000	
	8												1.0000	0.9992	0.9958	0.9848	0.9578	0.9050	0.8182	0.6964		
	9													1.0000	0.9999	0.9992	0.9963	0.9876	0.9662	0.9231	0.8491	
	10														1.0000	0.9999	0.9993	0.9972	0.9907	0.9745	0.9408	
	11																1.0000	0.9999	0.9995	0.9981	0.9937	0.9824
	12																	1.0000	0.9999	0.9997	0.9989	0.9963
	13																		1.0000	1.0000	0.9999	0.9995
14																			1.0000	1.0000	1.0000	
16	0	0.8515	0.7238	0.6143	0.5204	0.4401	0.3716	0.3131	0.2634	0.2211	0.1853	0.0743	0.0281	0.0100	0.0033	0.0010	0.0003	0.0001	0.0000			
	1	0.9891	0.9601	0.9182	0.8673	0.8108	0.7511	0.6902	0.6299	0.5711	0.5147	0.2839	0.1407	0.0635	0.0261	0.0098	0.0033	0.0010	0.0003			
	2	0.9995	0.9963	0.9887	0.9758	0.9571	0.9327	0.9031	0.8689	0.8306	0.7892	0.5614	0.3518	0.1971	0.0994	0.0451	0.0183	0.00				

$n$	$x \setminus p$	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	
17	0	0.8429	0.7093	0.5958	0.4996	0.4181	0.3493	0.2912	0.2423	0.2012	0.1668	0.0631	0.0225	0.0075	0.0023	0.0007	0.0002	0.0000	0.0000	
	1	0.9877	0.9554	0.9091	0.8535	0.7922	0.7283	0.6638	0.6005	0.5396	0.4818	0.2525	0.1182	0.0501	0.0193	0.0067	0.0021	0.0006	0.0001	
	2	0.9994	0.9956	0.9866	0.9714	0.9497	0.9218	0.8882	0.8497	0.8073	0.7618	0.5198	0.3096	0.1637	0.0774	0.0327	0.0123	0.0041	0.0012	
	3	1.0000	0.9997	0.9986	0.9960	0.9912	0.9836	0.9727	0.9581	0.9397	0.9174	0.7556	0.5489	0.3530	0.2019	0.1028	0.0464	0.0184	0.0064	
	4		1.0000	0.9999	0.9996	0.9988	0.9974	0.9949	0.9911	0.9855	0.9779	0.9013	0.7582	0.5739	0.3887	0.2348	0.1260	0.0596	0.0245	
	5			1.0000	1.0000	0.9999	0.9997	0.9993	0.9985	0.9973	0.9953	0.9681	0.8943	0.7653	0.5968	0.4197	0.2639	0.1471	0.0717	
	6				1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623	0.8929	0.7752	0.6188	0.4478	0.2902	0.1662		
	7					1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623	0.8929	0.7752	0.6188	0.4478	0.2902	0.1662	
	8						1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623	0.8929	0.7752	0.6188	0.4478	0.2902
	9							1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623	0.8929	0.7752	0.6188	0.4478
	10								1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623	0.8929	0.7752	0.6188
	11									1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623	0.8929	0.7752
	12										1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623	0.8929
	13											1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917	0.9623
	14												1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9917
	15													1.0000	1.0000	1.0000	0.9999	0.9998	0.9996	0.9992
	16														1.0000	1.0000	1.0000	0.9999	0.9998	0.9992
18	0	0.8262	0.6951	0.5606	0.4796	0.3774	0.3283	0.2708	0.2051	0.1831	0.1351	0.0456	0.0144	0.0042	0.0011	0.0004	0.0001	0.0000	0.0000	
	1	0.9847	0.9505	0.8900	0.8393	0.7547	0.7055	0.6378	0.5440	0.5091	0.4203	0.1985	0.0829	0.0310	0.0104	0.0046	0.0008	0.0003	0.0000	
	2	0.9991	0.9948	0.9817	0.9667	0.9335	0.9102	0.8725	0.8092	0.7832	0.7054	0.4413	0.2369	0.1113	0.0462	0.0236	0.0055	0.0025	0.0004	
	3	1.0000	0.9996	0.9978	0.9950	0.9868	0.9799	0.9667	0.9398	0.9277	0.8850	0.6841	0.4551	0.2631	0.1332	0.0783	0.0230	0.0120	0.0022	
	4		1.0000	0.9998	0.9994	0.9980	0.9966	0.9933	0.9853	0.9814	0.9648	0.8556	0.6733	0.4654	0.2822	0.1886	0.0696	0.0411	0.0096	
	5			1.0000	0.9999	0.9998	0.9995	0.9990	0.9971	0.9962	0.9914	0.9463	0.8369	0.6678	0.4739	0.3550	0.1629	0.1077	0.0318	
	6				1.0000	1.0000	1.0000	0.9999	0.9996	0.9994	0.9983	0.9837	0.9324	0.8251	0.6655	0.5491	0.3081	0.2258	0.0835	
	7					1.0000	1.0000	1.0000	0.9999	0.9997	0.9997	0.9959	0.9767	0.9225	0.8180	0.7283	0.4878	0.3915	0.1796	
	8						1.0000	1.0000	1.0000	0.9992	0.9933	0.9713	0.9161	0.8609	0.6675	0.5778	0.3238			
	9							1.0000	1.0000	0.9999	0.9984	0.9911	0.9674	0.9403	0.8139	0.7473	0.5000			
	10								1.0000	0.9997	0.9977	0.9895	0.9788	0.9115	0.8720	0.6762				
	11									1.0000	0.9995	0.9972	0.9938	0.9648	0.9463	0.8204				
	12										0.9999	0.9994	0.9986	0.9884	0.9817	0.9165				
	13											1.0000	0.9999	0.9997	0.9969	0.9951	0.9682			
	14												1.0000	1.0000	0.9994	0.9990	0.9904			
	15														0.9999	0.9999	0.9978			
	16															1.0000	1.0000	0.9996		
17																	1.0000	1.0000		
19	0	0.8262	0.6812	0.5606	0.4604	0.3774	0.3086	0.2519	0.2051	0.1666	0.1351	0.0456	0.0144	0.0042	0.0011	0.0003	0.0001	0.0000	0.0000	
	1	0.9847	0.9454	0.8900	0.8249	0.7547	0.6829	0.6121	0.5440	0.4798	0.4203	0.1985	0.0829	0.0310	0.0104	0.0031	0.0008	0.0002	0.0000	
	2	0.9991	0.9939	0.9817	0.9616	0.9335	0.8979	0.8561	0.8092	0.7585	0.7054	0.4413	0.2369	0.1113	0.0462	0.0170	0.0055	0.0015	0.0004	
	3	1.0000	0.9995	0.9978	0.9939	0.9868	0.9757	0.9602	0.9398	0.9147	0.8850	0.6841	0.4551	0.2631	0.1332	0.0591	0.0230	0.0077	0.0022	
	4		1.0000	0.9998	0.9993	0.9980	0.9956	0.9915	0.9853	0.9765	0.9648	0.8556	0.6733	0.4654	0.2822	0.1500	0.0696	0.0280	0.0096	
	5			1.0000	0.9999	0.9998	0.9994	0.9986	0.9971	0.9949	0.9914	0.9463	0.8369	0.6678	0.4739	0.2968	0.1629	0.0777	0.0318	
	6				1.0000	1.0000	0.9999	0.9998	0.9996	0.9991	0.9983	0.9837	0.9324	0.8251	0.6655	0.4812	0.3081	0.1727	0.0835	
	7					1.0000	1.0000	0.9999	0.9999	0.9997	0.9997	0.9959	0.9767	0.9225	0.8180	0.6656	0.4878	0.3169	0.1796	
	8						1.0000	1.0000	1.0000	0.9992	0.9933	0.9713	0.9161	0.8145	0.6675	0.4940	0.3238			
	9							1.0000	1.0000	0.9999	0.9984	0.9911	0.9674	0.9125	0.8139	0.6710	0.5000			
	10								1.0000	0.9997	0.9977	0.9895	0.9653	0.9115	0.8159	0.6762				
	11									1.0000	0.9995	0.9972	0.9886	0.9648	0.9129	0.8204				
	12										0.9999	0.9994	0.9969	0.9884	0.9658	0.9165				
	13											1.0000	0.9999	0.9993	0.9969	0.9891	0.9682			
	14												1.0000	0.9999	0.9994	0.9972	0.9904			
	15													1.0000	0.9999	0.9995	0.9978			
	16														1.0000	0.9999	0.9996			
17																1.0000	1.0000			
20	0	0.8179	0.6676	0.5438	0.4420	0.3585	0.2901	0.2342	0.1887	0.1516	0.1216	0.0388	0.0115	0.0032	0.0008	0.0002	0.0000	0.0000	0.0000	
	1	0.9831	0.9401	0.8802	0.8103	0.7358	0.6605	0.5869	0.5169	0.4516	0.3917	0.1756	0.0692	0.0243	0.0076	0.0021	0.0005	0.0001	0.0000	
	2	0.9990	0.9929	0.9790	0.9561	0.9245	0.8850	0.8390	0.7879	0.7334	0.6769	0.4049	0.2061	0.0913	0.0355	0.0121	0.0036	0.0009	0.0002	
	3	1.0000	0.9994	0.9973	0.9926	0.9841	0.9710	0.9529	0.9294	0.9007	0.8670	0.6477	0.4114	0.2252	0.1071	0.0444	0.0160	0.0049	0.0013	
	4		1.0000	0.9997	0.9990	0.9974	0.9944	0.9893	0.9817	0.9710	0.9568	0.8298	0.6296	0.4148	0.2375	0.1182	0.0510	0.0189	0.0059	
	5			1.0000	0.9999	0.9997	0.9991	0.9981	0.9962	0.9932	0.9887	0.9327	0.8042	0.6172	0.4164	0.2454	0.1256	0.0553	0.0207	
	6				1.0000	1.0000	0.9999	0.9997	0.9994	0.9987	0.9976	0.9781	0.9133	0.7858	0.6080	0.4166	0.2500	0.1299	0.0577	
	7					1.0000	1.0000	0.9999	0.9998	0.9996	0.9941	0.9679	0.8982	0.7723	0.6010	0.4159	0.2520	0.1316		
	8						1.0000	1.0000	1.0000	0.9999	0.9987	0.9900	0.9591	0.8867	0.7624	0.5956	0.4143	0.2517		
	9							1.0000	1.0000	0.9998	0.9974	0.9861	0.9520	0.8782	0.7553	0.5914	0.4119			
	10								1.0000	0.9994	0.9961	0.9829	0.9468	0.8725	0.7507	0.5881				
	11									0.9999	0.9991	0.9949	0.9804	0.9435	0.8692	0.7483				
	12										1.0000	0.9998	0.9987	0.9940	0.9790	0.9420	0.8684			
	13											1.0000	0.9997	0.9985	0.9935	0.9786	0.9423			
	14												1.0000	0.9997	0.9984	0.9936	0.9793			
	15													1.0000	0.9997	0.9985	0.9941			
	16														1.0000	0.9997	0.9987			
	17																1.0000	0.9998		
18																		1.0000		

Tabela 2: Função de distribuição de Poisson

$$F_X(x) = \sum_{k=0}^x \frac{e^{-\lambda} \lambda^k}{k!}$$

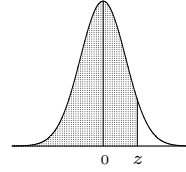
$\lambda$	$x$	0	1	2	3	4	5	6	7	8	9
0.01		0.9900	1.0000								
0.02		0.9802	0.9998	1.0000							
0.03		0.9704	0.9996	1.0000							
0.04		0.9608	0.9992	1.0000							
0.05		0.9512	0.9988	1.0000							
0.06		0.9418	0.9983	1.0000							
0.07		0.9324	0.9977	0.9999	1.0000						
0.08		0.9231	0.9970	0.9999	1.0000						
0.09		0.9139	0.9962	0.9999	1.0000						
0.10		0.9048	0.9953	0.9998	1.0000						
0.15		0.8607	0.9898	0.9995	1.0000						
0.20		0.8187	0.9825	0.9989	0.9999	1.0000					
0.25		0.7788	0.9735	0.9978	0.9999	1.0000					
0.30		0.7408	0.9631	0.9964	0.9997	1.0000					
0.35		0.7047	0.9513	0.9945	0.9995	1.0000					
0.40		0.6703	0.9384	0.9921	0.9992	0.9999	1.0000				
0.45		0.6376	0.9246	0.9891	0.9988	0.9999	1.0000				
0.50		0.6065	0.9098	0.9856	0.9982	0.9998	1.0000				
0.55		0.5769	0.8943	0.9815	0.9975	0.9997	1.0000				
0.60		0.5488	0.8781	0.9769	0.9966	0.9996	1.0000				
0.65		0.5220	0.8614	0.9717	0.9956	0.9994	0.9999	1.0000			
0.70		0.4966	0.8442	0.9659	0.9942	0.9992	0.9999	1.0000			
0.75		0.4724	0.8266	0.9595	0.9927	0.9989	0.9999	1.0000			
0.80		0.4493	0.8088	0.9526	0.9909	0.9986	0.9998	1.0000			
0.85		0.4274	0.7907	0.9451	0.9889	0.9982	0.9997	1.0000			
0.90		0.4066	0.7725	0.9371	0.9865	0.9977	0.9997	1.0000			
0.95		0.3867	0.7541	0.9287	0.9839	0.9971	0.9995	0.9999	1.0000		
1.00		0.3679	0.7358	0.9197	0.9810	0.9963	0.9994	0.9999	1.0000		
1.10		0.3329	0.6990	0.9004	0.9743	0.9946	0.9990	0.9999	1.0000		
1.20		0.3012	0.6626	0.8795	0.9662	0.9923	0.9985	0.9997	1.0000		
1.30		0.2725	0.6268	0.8571	0.9569	0.9893	0.9978	0.9996	0.9999	1.0000	
1.40		0.2466	0.5918	0.8335	0.9463	0.9857	0.9968	0.9994	0.9999	1.0000	
1.50		0.2231	0.5578	0.8088	0.9344	0.9814	0.9955	0.9991	0.9998	1.0000	
1.60		0.2019	0.5249	0.7834	0.9212	0.9763	0.9940	0.9987	0.9997	1.0000	
1.70		0.1827	0.4932	0.7572	0.9068	0.9704	0.9920	0.9981	0.9996	0.9999	1.0000
1.80		0.1653	0.4628	0.7306	0.8913	0.9636	0.9896	0.9974	0.9994	0.9999	1.0000
1.90		0.1496	0.4337	0.7037	0.8747	0.9559	0.9868	0.9966	0.9992	0.9998	1.0000
2.00	0	0.1353	0.4060	0.6767	0.8571	0.9473	0.9834	0.9955	0.9989	0.9998	1.0000
2.20	0	0.1108	0.3546	0.6227	0.8194	0.9275	0.9751	0.9925	0.9980	0.9995	0.9999
	10	1.0000									
2.40	0	0.0907	0.3084	0.5697	0.7787	0.9041	0.9643	0.9884	0.9967	0.9991	0.9998
	10	1.0000									
2.60	0	0.0743	0.2674	0.5184	0.7360	0.8774	0.9510	0.9828	0.9947	0.9985	0.9996
	10	0.9999	1.0000								
2.80	0	0.0608	0.2311	0.4695	0.6919	0.8477	0.9349	0.9756	0.9919	0.9976	0.9993
	10	0.9998	1.0000								
3.00	0	0.0498	0.1991	0.4232	0.6472	0.8153	0.9161	0.9665	0.9881	0.9962	0.9989
	10	0.9997	0.9999	1.0000							
3.20	0	0.0408	0.1712	0.3799	0.6025	0.7806	0.8946	0.9554	0.9832	0.9943	0.9982
	10	0.9995	0.9999	1.0000							
3.40	0	0.0334	0.1468	0.3397	0.5584	0.7442	0.8705	0.9421	0.9769	0.9917	0.9973
	10	0.9992	0.9998	0.9999	1.0000						
3.60	0	0.0273	0.1257	0.3027	0.5152	0.7064	0.8441	0.9267	0.9692	0.9883	0.9960
	10	0.9987	0.9996	0.9999	1.0000						
3.80	0	0.0224	0.1074	0.2689	0.4735	0.6678	0.8156	0.9091	0.9599	0.9840	0.9942
	10	0.9981	0.9994	0.9998	1.0000						
4.00	0	0.0183	0.0916	0.2381	0.4335	0.6288	0.7851	0.8893	0.9489	0.9786	0.9919
	10	0.9972	0.9991	0.9997	0.9999	1.0000					
4.20	0	0.0150	0.0780	0.2102	0.3954	0.5898	0.7531	0.8675	0.9361	0.9721	0.9889
	10	0.9959	0.9986	0.9996	0.9999	1.0000					
4.40	0	0.0123	0.0663	0.1851	0.3594	0.5512	0.7199	0.8436	0.9214	0.9642	0.9851
	10	0.9943	0.9980	0.9993	0.9998	0.9999	1.0000				
4.60	0	0.0101	0.0563	0.1626	0.3257	0.5132	0.6858	0.8180	0.9049	0.9549	0.9805
	10	0.9922	0.9971	0.9990	0.9997	0.9999	1.0000				
4.80	0	0.0082	0.0477	0.1425	0.2942	0.4763	0.6510	0.7908	0.8867	0.9442	0.9749
	10	0.9896	0.9960	0.9986	0.9995	0.9999	1.0000				
5.00	0	0.0067	0.0404	0.1247	0.2650	0.4405	0.6160	0.7622	0.8666	0.9319	0.9682
	10	0.9863	0.9945	0.9980	0.9993	0.9998	0.9999	1.0000			
5.20	0	0.0055	0.0342	0.1088	0.2381	0.4061	0.5809	0.7324	0.8449	0.9181	0.9603
	10	0.9823	0.9927	0.9972	0.9990	0.9997	0.9999	1.0000			
5.40	0	0.0045	0.0289	0.0948	0.2133	0.3733	0.5461	0.7017	0.8217	0.9027	0.9512
	10	0.9775	0.9904	0.9962	0.9986	0.9995	0.9998	0.9999	1.0000		
5.60	0	0.0037	0.0244	0.0824	0.1906	0.3422	0.5119	0.6703	0.7970	0.8857	0.9409
	10	0.9718	0.9875	0.9949	0.9980	0.9993	0.9998	0.9999	1.0000		
5.80	0	0.0030	0.0206	0.0715	0.1700	0.3127	0.4783	0.6384	0.7710	0.8672	0.9292
	10	0.9651	0.9841	0.9932	0.9973	0.9990	0.9996	0.9999	1.0000		

$\lambda$	$x$	0	1	2	3	4	5	6	7	8	9
6.00	0	0.0025	0.0174	0.0620	0.1512	0.2851	0.4457	0.6063	0.7440	0.8472	0.9161
	10	0.9574	0.9799	0.9912	0.9964	0.9986	0.9995	0.9998	0.9999	1.0000	
	20	1.0000									
6.20	0	0.0020	0.0146	0.0536	0.1342	0.2592	0.4141	0.5742	0.7160	0.8259	0.9016
	10	0.9486	0.9750	0.9887	0.9952	0.9981	0.9993	0.9997	0.9999	1.0000	
	20	1.0000									
6.40	0	0.0017	0.0123	0.0463	0.1189	0.2351	0.3837	0.5423	0.6873	0.8033	0.8858
	10	0.9386	0.9693	0.9857	0.9937	0.9974	0.9990	0.9996	0.9999	1.0000	
	20	1.0000									
6.60	0	0.0014	0.0103	0.0400	0.1052	0.2127	0.3547	0.5108	0.6581	0.7796	0.8686
	10	0.9274	0.9627	0.9821	0.9920	0.9966	0.9986	0.9995	0.9998	0.9999	1.0000
	20	1.0000									
6.80	0	0.0011	0.0087	0.0344	0.0928	0.1920	0.3270	0.4799	0.6285	0.7548	0.8502
	10	0.9151	0.9552	0.9779	0.9898	0.9956	0.9982	0.9993	0.9997	0.9999	1.0000
	20	1.0000									
7.00	0	0.0009	0.0073	0.0296	0.0818	0.1730	0.3007	0.4497	0.5987	0.7291	0.8305
	10	0.9015	0.9467	0.9730	0.9872	0.9943	0.9976	0.9990	0.9996	0.9999	1.0000
	20	1.0000									
7.20	0	0.0007	0.0061	0.0255	0.0719	0.1555	0.2759	0.4204	0.5689	0.7027	0.8096
	10	0.8867	0.9371	0.9673	0.9841	0.9927	0.9969	0.9987	0.9995	0.9998	0.9999
	20	1.0000									
7.40	0	0.0006	0.0051	0.0219	0.0632	0.1395	0.2526	0.3920	0.5393	0.6757	0.7877
	10	0.8707	0.9265	0.9609	0.9805	0.9908	0.9959	0.9983	0.9993	0.9997	0.9999
	20	1.0000									
7.60	0	0.0005	0.0043	0.0188	0.0554	0.1249	0.2307	0.3646	0.5100	0.6482	0.7649
	10	0.8535	0.9148	0.9536	0.9762	0.9886	0.9948	0.9978	0.9991	0.9996	0.9999
	20	1.0000									
7.80	0	0.0004	0.0036	0.0161	0.0485	0.1117	0.2103	0.3384	0.4812	0.6204	0.7411
	10	0.8352	0.9020	0.9454	0.9714	0.9859	0.9934	0.9971	0.9988	0.9995	0.9998
	20	0.9999	1.0000								
8.00	0	0.0003	0.0030	0.0138	0.0424	0.0996	0.1912	0.3134	0.4530	0.5925	0.7166
	10	0.8159	0.8881	0.9362	0.9658	0.9827	0.9918	0.9963	0.9984	0.9993	0.9997
	20	0.9999	1.0000								
8.20	0	0.0003	0.0025	0.0118	0.0370	0.0887	0.1736	0.2896	0.4254	0.5647	0.6915
	10	0.7955	0.8731	0.9261	0.9595	0.9791	0.9898	0.9953	0.9979	0.9991	0.9997
	20	0.9999	1.0000								
8.40	0	0.0002	0.0021	0.0100	0.0323	0.0789	0.1573	0.2670	0.3987	0.5369	0.6659
	10	0.7743	0.8571	0.9150	0.9524	0.9749	0.9875	0.9941	0.9973	0.9989	0.9995
	20	0.9998	0.9999	1.0000							
8.60	0	0.0002	0.0018	0.0086	0.0281	0.0701	0.1422	0.2457	0.3728	0.5094	0.6400
	10	0.7522	0.8400	0.9029	0.9445	0.9701	0.9848	0.9926	0.9966	0.9985	0.9994
	20	0.9998	0.9999	1.0000							
8.80	0	0.0002	0.0015	0.0073	0.0244	0.0621	0.1284	0.2256	0.3478	0.4823	0.6137
	10	0.7294	0.8220	0.8898	0.9358	0.9647	0.9816	0.9909	0.9957	0.9981	0.9992
	20	0.9997	0.9999	1.0000							
9.00	0	0.0001	0.0012	0.0062	0.0212	0.0550	0.1157	0.2068	0.3239	0.4557	0.5874
	10	0.7060	0.8030	0.8758	0.9261	0.9585	0.9780	0.9889	0.9947	0.9976	0.9989
	20	0.9996	0.9998	0.9999	1.0000						
9.20	0	0.0001	0.0010	0.0053	0.0184	0.0486	0.1041	0.1892	0.3010	0.4296	0.5611
	10	0.6820	0.7832	0.8607	0.9156	0.9517	0.9738	0.9865	0.9934	0.9969	0.9986
	20	0.9994	0.9998	0.9999	1.0000						
9.40	0	0.0001	0.0009	0.0045	0.0160	0.0429	0.0935	0.1727	0.2792	0.4042	0.5349
	10	0.6576	0.7626	0.8448	0.9042	0.9441	0.9691	0.9838	0.9919	0.9962	0.9983
	20	0.9992	0.9997	0.9999	1.0000						
9.60	0	0.0001	0.0007	0.0038	0.0138	0.0378	0.0838	0.1574	0.2584	0.3796	0.5089
	10	0.6329	0.7412	0.8279	0.8919	0.9357	0.9638	0.9806	0.9902	0.9952	0.9978
	20	0.9990	0.9996	0.9998	0.9999	1.0000					
9.80	0	0.0001	0.0006	0.0033	0.0120	0.0333	0.0750	0.1433	0.2388	0.3558	0.4832
	10	0.6080	0.7193	0.8101	0.8786	0.9265	0.9579	0.9770	0.9881	0.9941	0.9972
	20	0.9987	0.9995	0.9998	0.9999	1.0000					
10.00	0	0.0000	0.0005	0.0028	0.0103	0.0293	0.0671	0.1301	0.2202	0.3328	0.4579
	10	0.5830	0.6968	0.7916	0.8645	0.9165	0.9513	0.9730	0.9857	0.9928	0.9965
	20	0.9984	0.9993	0.9997	0.9999	1.0000					
10.50	0	0.0000	0.0003	0.0018	0.0071	0.0211	0.0504	0.1016	0.1785	0.2794	0.3971
	10	0.5207	0.6387	0.7420	0.8253	0.8879	0.9317	0.9604	0.9781	0.9885	0.9942
	20	0.9972	0.9987	0.9994	0.9998	0.9999	1.0000				
11.00	0	0.0000	0.0002	0.0012	0.0049	0.0151	0.0375	0.0786	0.1432	0.2320	0.3405
	10	0.4599	0.5793	0.6887	0.7813	0.8540	0.9074	0.9441	0.9678	0.9823	0.9907
	20	0.9953	0.9977	0.9990	0.9995	0.9998	0.9999	1.0000			
11.50	0	0.0000	0.0001	0.0008	0.0034	0.0107	0.0277	0.0603	0.1137	0.1906	0.2888
	10	0.4017	0.5198	0.6329	0.7330	0.8153	0.8783	0.9236	0.9542	0.9738	0.9857
	20	0.9925	0.9962	0.9982	0.9992	0.9996	0.9998	0.9999	1.0000		
12.00	0	0.0000	0.0001	0.0005	0.0023	0.0076	0.0203	0.0458	0.0895	0.1550	0.2424
	10	0.3472	0.4616	0.5760	0.6815	0.7720	0.8444	0.8987	0.9370	0.9626	0.9787
	20	0.9884	0.9939	0.9970	0.9985	0.9993	0.9997	0.9999	0.9999	1.0000	
12.50	0	0.0000	0.0001	0.0003	0.0016	0.0053	0.0148	0.0346	0.0698	0.1249	0.2014
	10	0.2971	0.4058	0.5190	0.6278	0.7250	0.8060	0.8693	0.9158	0.9481	0.9694
	20	0.9827	0.9906	0.9951	0.9975	0.9988	0.9994	0.9997	0.9999	1.0000	
13.00	0	0.0000	0.0000	0.0002	0.0011	0.0037	0.0107	0.0259	0.0540	0.0998	0.1658
	10	0.2517	0.3532	0.4631	0.5730	0.6751	0.7636	0.8355	0.8905	0.9302	0.9573
	20	0.9750	0.9859	0.9924	0.9960	0.9980	0.9990	0.9995	0.9998	0.9999	1.0000
13.50	0	0.0000	0.0000	0.0001	0.0007	0.0026	0.0077	0.0193	0.0415	0.0790	0.1353
	10	0.2112	0.3045	0.4093	0.5182	0.6233	0.7178	0.7975	0.8609	0.9084	0.9421
	20	0.9649	0.9796	0.9885	0.9938	0.9968	0.9984	0.9992	0.9996	0.9998	0.9999
	30	1.0000									

$\lambda$	$x$	0	1	2	3	4	5	6	7	8	9
14.00	0	0.0000	0.0000	0.0001	0.0005	0.0018	0.0055	0.0142	0.0316	0.0621	0.1094
	10	0.1757	0.2600	0.3585	0.4644	0.5704	0.6694	0.7559	0.8272	0.8826	0.9235
	20	0.9521	0.9712	0.9833	0.9907	0.9950	0.9974	0.9987	0.9994	0.9997	0.9999
	30	0.9999	1.0000								
14.50	0	0.0000	0.0000	0.0001	0.0003	0.0012	0.0039	0.0105	0.0239	0.0484	0.0878
	10	0.1449	0.2201	0.3111	0.4125	0.5176	0.6192	0.7112	0.7897	0.8530	0.9012
	20	0.9362	0.9604	0.9763	0.9863	0.9924	0.9959	0.9979	0.9989	0.9995	0.9998
	30	0.9999	1.0000								
15.00	0	0.0000	0.0000	0.0000	0.0002	0.0009	0.0028	0.0076	0.0180	0.0374	0.0699
	10	0.1185	0.1848	0.2676	0.3632	0.4657	0.5681	0.6641	0.7489	0.8195	0.8752
	20	0.9170	0.9469	0.9673	0.9805	0.9888	0.9938	0.9967	0.9983	0.9991	0.9996
	30	0.9998	0.9999	1.0000							
16.00	0	0.0000	0.0000	0.0000	0.0001	0.0004	0.0014	0.0040	0.0100	0.0220	0.0433
	10	0.0774	0.1270	0.1931	0.2745	0.3675	0.4667	0.5660	0.6593	0.7423	0.8122
	20	0.8682	0.9108	0.9418	0.9633	0.9777	0.9869	0.9925	0.9959	0.9978	0.9989
	30	0.9994	0.9997	0.9999	0.9999	1.0000					
17.00	0	0.0000	0.0000	0.0000	0.0000	0.0002	0.0007	0.0021	0.0054	0.0126	0.0261
	10	0.0491	0.0847	0.1350	0.2009	0.2808	0.3715	0.4677	0.5640	0.6550	0.7363
	20	0.8055	0.8615	0.9047	0.9367	0.9594	0.9748	0.9848	0.9912	0.9950	0.9973
	30	0.9986	0.9993	0.9996	0.9998	0.9999	1.0000				
18.00	0	0.0000	0.0000	0.0000	0.0000	0.0001	0.0003	0.0010	0.0029	0.0071	0.0154
	10	0.0304	0.0549	0.0917	0.1426	0.2081	0.2867	0.3751	0.4686	0.5622	0.6509
	20	0.7307	0.7991	0.8551	0.8989	0.9317	0.9554	0.9718	0.9827	0.9897	0.9941
	30	0.9967	0.9982	0.9990	0.9995	0.9998	0.9999	0.9999	1.0000		
19.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0005	0.0015	0.0039	0.0089
	10	0.0183	0.0347	0.0606	0.0984	0.1497	0.2148	0.2920	0.3784	0.4695	0.5606
	20	0.6472	0.7255	0.7931	0.8490	0.8933	0.9269	0.9514	0.9687	0.9805	0.9882
	30	0.9930	0.9960	0.9978	0.9988	0.9994	0.9997	0.9998	0.9999	1.0000	
20.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0003	0.0008	0.0021	0.0050
	10	0.0108	0.0214	0.0390	0.0661	0.1049	0.1565	0.2211	0.2970	0.3814	0.4703
	20	0.5591	0.6437	0.7206	0.7875	0.8432	0.8878	0.9221	0.9475	0.9657	0.9782
	30	0.9865	0.9919	0.9953	0.9973	0.9985	0.9992	0.9996	0.9998	0.9999	0.9999
	40	1.0000									
21.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0004	0.0011	0.0028
	10	0.0063	0.0129	0.0245	0.0434	0.0716	0.1111	0.1629	0.2270	0.3017	0.3843
	20	0.4710	0.5577	0.6405	0.7160	0.7822	0.8377	0.8826	0.9175	0.9436	0.9626
	30	0.9758	0.9848	0.9907	0.9945	0.9968	0.9982	0.9990	0.9995	0.9997	0.9999
	40	0.9999	1.0000								
22.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0002	0.0006	0.0015
	10	0.0035	0.0076	0.0151	0.0278	0.0477	0.0769	0.1170	0.1690	0.2325	0.3060
	20	0.3869	0.4716	0.5564	0.6374	0.7117	0.7771	0.8324	0.8775	0.9129	0.9398
	30	0.9595	0.9735	0.9831	0.9895	0.9936	0.9962	0.9978	0.9988	0.9993	0.9996
	40	0.9998	0.9999	1.0000							
23.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0003	0.0008
	10	0.0020	0.0044	0.0091	0.0174	0.0311	0.0520	0.0821	0.1228	0.1748	0.2377
	20	0.3101	0.3894	0.4723	0.5551	0.6346	0.7077	0.7723	0.8274	0.8726	0.9085
	30	0.9360	0.9564	0.9711	0.9813	0.9882	0.9927	0.9956	0.9974	0.9985	0.9992
	40	0.9996	0.9998	0.9999	0.9999	1.0000					
24.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0004
	10	0.0011	0.0025	0.0054	0.0107	0.0198	0.0344	0.0563	0.0871	0.1283	0.1803
	20	0.2426	0.3139	0.3917	0.4728	0.5540	0.6319	0.7038	0.7677	0.8225	0.8679
	30	0.9042	0.9322	0.9533	0.9686	0.9794	0.9868	0.9918	0.9950	0.9970	0.9983
	40	0.9990	0.9995	0.9997	0.9998	0.9999	1.0000				
25.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0002
	10	0.0006	0.0014	0.0031	0.0065	0.0124	0.0223	0.0377	0.0605	0.0920	0.1336
	20	0.1855	0.2473	0.3175	0.3939	0.4734	0.5529	0.6294	0.7002	0.7634	0.8179
	30	0.8633	0.8999	0.9285	0.9502	0.9662	0.9775	0.9854	0.9908	0.9943	0.9966
	40	0.9980	0.9988	0.9993	0.9996	0.9998	0.9999	0.9999	1.0000		
30.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	10	0.0000	0.0001	0.0002	0.0004	0.0009	0.0019	0.0039	0.0073	0.0129	0.0219
	20	0.0353	0.0544	0.0806	0.1146	0.1572	0.2084	0.2673	0.3329	0.4031	0.4757
	30	0.5484	0.6186	0.6845	0.7444	0.7973	0.8426	0.8804	0.9110	0.9352	0.9537
	40	0.9677	0.9779	0.9852	0.9903	0.9937	0.9960	0.9975	0.9985	0.9991	0.9995
	50	0.9997	0.9998	0.9999	0.9999	1.0000					
35.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0003	0.0006	0.0012	0.0023
	20	0.0043	0.0076	0.0128	0.0208	0.0324	0.0486	0.0705	0.0988	0.1343	0.1770
	30	0.2269	0.2833	0.3449	0.4102	0.4775	0.5448	0.6102	0.6721	0.7291	0.7802
	40	0.8249	0.8631	0.8950	0.9209	0.9415	0.9575	0.9697	0.9788	0.9854	0.9902
	50	0.9935	0.9957	0.9973	0.9983	0.9989	0.9993	0.9996	0.9998	0.9999	0.9999
60	1.0000										
40.00	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0002
	20	0.0004	0.0007	0.0014	0.0026	0.0045	0.0076	0.0123	0.0193	0.0294	0.0432
	30	0.0617	0.0855	0.1153	0.1514	0.1939	0.2424	0.2963	0.3547	0.4160	0.4790
	40	0.5419	0.6033	0.6618	0.7162	0.7657	0.8097	0.8479	0.8804	0.9075	0.9297
	50	0.9474	0.9613	0.9719	0.9800	0.9860	0.9903	0.9934	0.9956	0.9971	0.9981
60	0.9988	0.9992	0.9995	0.9997	0.9998	0.9999	0.9999	1.0000			

**Tabela 3:** Função de distribuição Normal reduzida:  $Z \sim N(0, 1)$

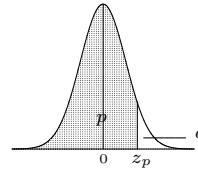
$$\Phi(z) = \int_{-\infty}^z \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}t^2} dt$$



$z$	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

Tabela 4: Quantis da função de distribuição  $Z \sim N(0, 1)$

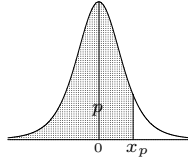
$$z_p = \Phi^{-1}(p) = \Phi^{-1}(1 - q)$$



$q$	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010	
0.00	$\infty$	3.0902	2.8782	2.7478	2.6521	2.5758	2.5121	2.4573	2.4089	2.3656	2.3263	0.99
0.01	2.3263	2.2904	2.2571	2.2262	2.1973	2.1701	2.1444	2.1201	2.0969	2.0748	2.0537	0.98
0.02	2.0537	2.0335	2.0141	1.9954	1.9774	1.9600	1.9431	1.9268	1.9110	1.8957	1.8808	0.97
0.03	1.8808	1.8663	1.8522	1.8384	1.8250	1.8119	1.7991	1.7866	1.7744	1.7624	1.7507	0.96
0.04	1.7507	1.7392	1.7279	1.7169	1.7060	1.6954	1.6849	1.6747	1.6646	1.6546	1.6449	0.95
0.05	1.6449	1.6352	1.6258	1.6164	1.6072	1.5982	1.5893	1.5805	1.5718	1.5632	1.5548	0.94
0.06	1.5548	1.5464	1.5382	1.5301	1.5220	1.5141	1.5063	1.4985	1.4909	1.4833	1.4758	0.93
0.07	1.4758	1.4684	1.4611	1.4538	1.4466	1.4395	1.4325	1.4255	1.4187	1.4118	1.4051	0.92
0.08	1.4051	1.3984	1.3917	1.3852	1.3787	1.3722	1.3658	1.3595	1.3532	1.3469	1.3408	0.91
0.09	1.3408	1.3346	1.3285	1.3225	1.3165	1.3106	1.3047	1.2988	1.2930	1.2873	1.2816	0.90
0.10	1.2816	1.2759	1.2702	1.2646	1.2591	1.2536	1.2481	1.2426	1.2372	1.2319	1.2265	0.89
0.11	1.2265	1.2212	1.2160	1.2107	1.2055	1.2004	1.1952	1.1901	1.1850	1.1800	1.1750	0.88
0.12	1.1750	1.1700	1.1650	1.1601	1.1552	1.1503	1.1455	1.1407	1.1359	1.1311	1.1264	0.87
0.13	1.1264	1.1217	1.1170	1.1123	1.1077	1.1031	1.0985	1.0939	1.0893	1.0848	1.0803	0.86
0.14	1.0803	1.0758	1.0714	1.0669	1.0625	1.0581	1.0537	1.0494	1.0451	1.0407	1.0364	0.85
0.15	1.0364	1.0322	1.0279	1.0237	1.0194	1.0152	1.0110	1.0069	1.0027	0.9986	0.9945	0.84
0.16	0.9945	0.9904	0.9863	0.9822	0.9782	0.9741	0.9701	0.9661	0.9621	0.9581	0.9542	0.83
0.17	0.9542	0.9502	0.9463	0.9424	0.9385	0.9346	0.9307	0.9269	0.9230	0.9192	0.9154	0.82
0.18	0.9154	0.9116	0.9078	0.9040	0.9002	0.8965	0.8927	0.8890	0.8853	0.8816	0.8779	0.81
0.19	0.8779	0.8742	0.8706	0.8669	0.8632	0.8596	0.8560	0.8524	0.8488	0.8452	0.8416	0.80
0.20	0.8416	0.8381	0.8345	0.8310	0.8274	0.8239	0.8204	0.8169	0.8134	0.8099	0.8064	0.79
0.21	0.8064	0.8030	0.7995	0.7961	0.7926	0.7892	0.7858	0.7824	0.7790	0.7756	0.7722	0.78
0.22	0.7722	0.7688	0.7655	0.7621	0.7588	0.7554	0.7521	0.7488	0.7454	0.7421	0.7388	0.77
0.23	0.7388	0.7356	0.7323	0.7290	0.7257	0.7225	0.7192	0.7160	0.7128	0.7095	0.7063	0.76
0.24	0.7063	0.7031	0.6999	0.6967	0.6935	0.6903	0.6871	0.6840	0.6808	0.6776	0.6745	0.75
0.25	0.6745	0.6713	0.6682	0.6651	0.6620	0.6588	0.6557	0.6526	0.6495	0.6464	0.6433	0.74
0.26	0.6433	0.6403	0.6372	0.6341	0.6311	0.6280	0.6250	0.6219	0.6189	0.6158	0.6128	0.73
0.27	0.6128	0.6098	0.6068	0.6038	0.6008	0.5978	0.5948	0.5918	0.5888	0.5858	0.5828	0.72
0.28	0.5828	0.5799	0.5769	0.5740	0.5710	0.5681	0.5651	0.5622	0.5592	0.5563	0.5534	0.71
0.29	0.5534	0.5505	0.5476	0.5446	0.5417	0.5388	0.5359	0.5330	0.5302	0.5273	0.5244	0.70
0.30	0.5244	0.5215	0.5187	0.5158	0.5129	0.5101	0.5072	0.5044	0.5015	0.4987	0.4958	0.69
0.31	0.4958	0.4930	0.4902	0.4874	0.4845	0.4817	0.4789	0.4761	0.4733	0.4705	0.4677	0.68
0.32	0.4677	0.4649	0.4621	0.4593	0.4565	0.4538	0.4510	0.4482	0.4454	0.4427	0.4399	0.67
0.33	0.4399	0.4372	0.4344	0.4316	0.4289	0.4261	0.4234	0.4207	0.4179	0.4152	0.4125	0.66
0.34	0.4125	0.4097	0.4070	0.4043	0.4016	0.3989	0.3961	0.3934	0.3907	0.3880	0.3853	0.65
0.35	0.3853	0.3826	0.3799	0.3772	0.3745	0.3719	0.3692	0.3665	0.3638	0.3611	0.3585	0.64
0.36	0.3585	0.3558	0.3531	0.3505	0.3478	0.3451	0.3425	0.3398	0.3372	0.3345	0.3319	0.63
0.37	0.3319	0.3292	0.3266	0.3239	0.3213	0.3186	0.3160	0.3134	0.3107	0.3081	0.3055	0.62
0.38	0.3055	0.3029	0.3002	0.2976	0.2950	0.2924	0.2898	0.2871	0.2845	0.2819	0.2793	0.61
0.39	0.2793	0.2767	0.2741	0.2715	0.2689	0.2663	0.2637	0.2611	0.2585	0.2559	0.2533	0.60
0.40	0.2533	0.2508	0.2482	0.2456	0.2430	0.2404	0.2378	0.2353	0.2327	0.2301	0.2275	0.59
0.41	0.2275	0.2250	0.2224	0.2198	0.2173	0.2147	0.2121	0.2096	0.2070	0.2045	0.2019	0.58
0.42	0.2019	0.1993	0.1968	0.1942	0.1917	0.1891	0.1866	0.1840	0.1815	0.1789	0.1764	0.57
0.43	0.1764	0.1738	0.1713	0.1687	0.1662	0.1637	0.1611	0.1586	0.1560	0.1535	0.1510	0.56
0.44	0.1510	0.1484	0.1459	0.1434	0.1408	0.1383	0.1358	0.1332	0.1307	0.1282	0.1257	0.55
0.45	0.1257	0.1231	0.1206	0.1181	0.1156	0.1130	0.1105	0.1080	0.1055	0.1030	0.1004	0.54
0.46	0.1004	0.0979	0.0954	0.0929	0.0904	0.0878	0.0853	0.0828	0.0803	0.0778	0.0753	0.53
0.47	0.0753	0.0728	0.0702	0.0677	0.0652	0.0627	0.0602	0.0577	0.0552	0.0527	0.0502	0.52
0.48	0.0502	0.0476	0.0451	0.0426	0.0401	0.0376	0.0351	0.0326	0.0301	0.0276	0.0251	0.51
0.49	0.0251	0.0226	0.0201	0.0175	0.0150	0.0125	0.0100	0.0075	0.0050	0.0025	0.0000	0.50
	0.010	0.009	0.008	0.007	0.006	0.005	0.004	0.003	0.002	0.001	0.000	$p$



**Tabela 5:** Quantis da função de distribuição  $t$ -Student  $X \sim t_{(n)} : x_p = F_X^{-1}(p)$



$n \setminus p$	0.6	0.7	0.75	0.8	0.85	0.9	0.925	0.95	0.975	0.99	0.995	0.999	0.9995
1	0.325	0.727	1.000	1.376	1.963	3.078	4.165	6.314	12.706	31.821	63.656	318.289	636.578
2	0.289	0.617	0.816	1.061	1.386	1.886	2.282	2.920	4.303	6.965	9.925	22.328	31.600
3	0.277	0.584	0.765	0.978	1.250	1.638	1.924	2.353	3.182	4.541	5.841	10.214	12.924
4	0.271	0.569	0.741	0.941	1.190	1.533	1.778	2.132	2.776	3.747	4.604	7.173	8.610
5	0.267	0.559	0.727	0.920	1.156	1.476	1.699	2.015	2.571	3.365	4.032	5.894	6.869
6	0.265	0.553	0.718	0.906	1.134	1.440	1.650	1.943	2.447	3.143	3.707	5.208	5.959
7	0.263	0.549	0.711	0.896	1.119	1.415	1.617	1.895	2.365	2.998	3.499	4.785	5.408
8	0.262	0.546	0.706	0.889	1.108	1.397	1.592	1.860	2.306	2.896	3.355	4.501	5.041
9	0.261	0.543	0.703	0.883	1.100	1.383	1.574	1.833	2.262	2.821	3.250	4.297	4.781
10	0.260	0.542	0.700	0.879	1.093	1.372	1.559	1.812	2.228	2.764	3.169	4.144	4.587
11	0.260	0.540	0.697	0.876	1.088	1.363	1.548	1.796	2.201	2.718	3.106	4.025	4.437
12	0.259	0.539	0.695	0.873	1.083	1.356	1.538	1.782	2.179	2.681	3.055	3.930	4.318
13	0.259	0.538	0.694	0.870	1.079	1.350	1.530	1.771	2.160	2.650	3.012	3.852	4.221
14	0.258	0.537	0.692	0.868	1.076	1.345	1.523	1.761	2.145	2.624	2.977	3.787	4.140
15	0.258	0.536	0.691	0.866	1.074	1.341	1.517	1.753	2.131	2.602	2.947	3.733	4.073
16	0.258	0.535	0.690	0.865	1.071	1.337	1.512	1.746	2.120	2.583	2.921	3.686	4.015
17	0.257	0.534	0.689	0.863	1.069	1.333	1.508	1.740	2.110	2.567	2.898	3.646	3.965
18	0.257	0.534	0.688	0.862	1.067	1.330	1.504	1.734	2.101	2.552	2.878	3.610	3.922
19	0.257	0.533	0.688	0.861	1.066	1.328	1.500	1.729	2.093	2.539	2.861	3.579	3.883
20	0.257	0.533	0.687	0.860	1.064	1.325	1.497	1.725	2.086	2.528	2.845	3.552	3.850
21	0.257	0.532	0.686	0.859	1.063	1.323	1.494	1.721	2.080	2.518	2.831	3.527	3.819
22	0.256	0.532	0.686	0.858	1.061	1.321	1.492	1.717	2.074	2.508	2.819	3.505	3.792
23	0.256	0.532	0.685	0.858	1.060	1.319	1.489	1.714	2.069	2.500	2.807	3.485	3.768
24	0.256	0.531	0.685	0.857	1.059	1.318	1.487	1.711	2.064	2.492	2.797	3.467	3.745
25	0.256	0.531	0.684	0.856	1.058	1.316	1.485	1.708	2.060	2.485	2.787	3.450	3.725
26	0.256	0.531	0.684	0.856	1.058	1.315	1.483	1.706	2.056	2.479	2.779	3.435	3.707
27	0.256	0.531	0.684	0.855	1.057	1.314	1.482	1.703	2.052	2.473	2.771	3.421	3.689
28	0.256	0.530	0.683	0.855	1.056	1.313	1.480	1.701	2.048	2.467	2.763	3.408	3.674
29	0.256	0.530	0.683	0.854	1.055	1.311	1.479	1.699	2.045	2.462	2.756	3.396	3.660
30	0.256	0.530	0.683	0.854	1.055	1.310	1.477	1.697	2.042	2.457	2.750	3.385	3.646
40	0.255	0.529	0.681	0.851	1.050	1.303	1.468	1.684	2.021	2.423	2.704	3.307	3.551
45	0.255	0.528	0.680	0.850	1.049	1.301	1.465	1.679	2.014	2.412	2.690	3.281	3.520
50	0.255	0.528	0.679	0.849	1.047	1.299	1.462	1.676	2.009	2.403	2.678	3.261	3.496
60	0.254	0.527	0.679	0.848	1.045	1.296	1.458	1.671	2.000	2.390	2.660	3.232	3.460
70	0.254	0.527	0.678	0.847	1.044	1.294	1.456	1.667	1.994	2.381	2.648	3.211	3.435
80	0.254	0.526	0.678	0.846	1.043	1.292	1.453	1.664	1.990	2.374	2.639	3.195	3.416
90	0.254	0.526	0.677	0.846	1.042	1.291	1.452	1.662	1.987	2.368	2.632	3.183	3.402
100	0.254	0.526	0.677	0.845	1.042	1.290	1.451	1.660	1.984	2.364	2.626	3.174	3.390
120	0.254	0.526	0.677	0.845	1.041	1.289	1.449	1.658	1.980	2.358	2.617	3.160	3.373
150	0.254	0.526	0.676	0.844	1.040	1.287	1.447	1.655	1.976	2.351	2.609	3.145	3.357
$\infty$	0.253	0.524	0.675	0.842	1.036	1.282	1.440	1.645	1.960	2.327	2.576	3.091	3.291

Tabela 6: Quantis da função de distribuição Qui-quadrado  $X \sim \chi^2_{(n)} : x_p = F_X^{-1}(p)$

$n \setminus p$	0.0005	0.001	0.005	0.01	0.025	0.05	0.075	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.85	0.90	0.925	0.950	0.975	0.990	0.995	0.999	0.9995
1	3.9E-07	1.6E-06	3.9E-05	0.0002	0.0010	0.0039	0.0089	0.0158	0.0358	0.0642	0.148	0.275	0.455	0.708	1.074	1.642	2.072	2.706	3.170	3.841	5.024	6.635	7.879	10.83	12.12
2	0.0010	0.0020	0.0100	0.0201	0.0506	0.103	0.156	0.211	0.325	0.446	0.713	1.022	1.386	1.833	2.408	3.219	3.794	4.605	5.181	5.991	7.378	9.210	10.60	13.82	15.20
3	0.0153	0.0243	0.0717	0.115	0.216	0.352	0.472	0.584	0.798	1.005	1.424	1.869	2.366	2.946	3.665	4.642	5.317	6.251	6.905	7.815	9.348	11.34	12.84	16.27	17.73
4	0.0639	0.0908	0.207	0.297	0.484	0.711	0.897	1.064	1.366	1.649	2.195	2.753	3.357	4.045	4.878	5.989	6.745	7.779	8.496	9.488	11.14	13.28	14.86	18.47	20.00
5	0.158	0.210	0.412	0.554	0.831	1.145	1.394	1.610	1.994	2.343	3.000	3.656	4.351	5.132	6.064	7.289	8.115	9.236	10.01	11.07	12.83	15.09	16.75	20.51	22.11
6	0.299	0.381	0.676	0.872	1.237	1.635	1.941	2.204	2.661	3.070	3.828	4.570	5.348	6.211	7.231	8.558	9.446	10.64	11.47	12.59	14.45	16.81	18.55	22.46	24.10
7	0.485	0.599	0.989	1.239	1.690	2.167	2.528	2.833	3.358	3.822	4.671	5.493	6.346	7.283	8.383	9.803	10.75	12.02	12.88	14.07	16.01	18.48	20.28	24.32	26.02
8	0.710	0.857	1.344	1.647	2.180	2.733	3.144	3.498	4.078	4.594	5.527	6.343	7.244	8.251	9.524	11.178	12.34	13.36	14.27	15.51	17.53	20.09	21.95	26.12	27.87
9	0.972	1.152	1.735	2.088	2.700	3.325	3.785	4.168	4.817	5.380	6.393	7.357	8.343	9.414	10.66	12.24	13.29	14.68	15.63	16.92	19.02	21.67	23.59	27.88	29.67
10	1.265	1.479	2.156	2.558	3.247	3.940	4.446	4.865	5.570	6.179	7.267	8.295	9.342	10.47	11.78	13.44	14.53	15.99	16.97	18.31	20.48	23.21	25.19	29.59	31.42
11	1.587	1.834	2.603	3.053	3.816	4.575	5.124	5.578	6.336	6.989	8.148	9.237	10.34	11.53	12.90	14.63	15.77	17.28	18.29	19.68	21.92	24.73	26.76	31.26	33.14
12	1.935	2.214	3.074	3.571	4.404	5.226	5.818	6.304	7.114	7.807	9.034	10.18	11.34	12.58	14.01	15.81	16.99	18.55	19.60	21.03	23.34	26.22	28.30	32.91	34.82
13	2.305	2.617	3.565	4.107	5.009	5.892	6.524	7.041	7.901	8.634	9.926	11.13	12.34	13.64	15.12	16.98	18.20	19.81	20.90	22.36	24.74	27.69	29.82	34.53	36.48
14	2.697	3.041	4.075	4.660	5.629	6.571	7.242	7.790	8.696	9.467	10.82	12.08	13.34	14.69	16.22	18.15	19.41	21.06	22.18	23.68	26.12	29.14	31.32	36.12	38.11
15	3.107	3.483	4.601	5.229	6.262	7.261	7.969	8.547	9.499	10.31	11.72	13.03	14.34	15.73	17.32	19.31	20.60	22.31	23.45	25.00	27.49	30.58	32.80	37.70	39.72
16	3.536	3.942	5.142	5.812	6.908	7.962	8.707	9.312	10.31	11.15	12.62	13.98	15.34	16.78	18.42	20.47	21.79	23.54	24.72	26.30	28.85	32.00	34.27	39.25	41.31
17	3.980	4.416	5.697	6.408	7.564	8.672	9.452	10.09	11.12	12.00	13.53	14.94	16.34	17.82	19.51	21.61	22.98	24.77	25.97	27.59	30.19	33.41	35.72	40.79	42.88
18	4.439	4.905	6.265	7.015	8.231	9.390	10.21	10.86	11.95	12.86	14.44	15.89	17.34	18.87	20.60	22.76	24.16	25.99	27.22	28.87	31.53	34.81	37.16	42.31	44.43
19	4.913	5.407	6.844	7.633	8.907	10.12	10.97	11.65	12.77	13.72	15.35	16.85	18.34	19.91	21.69	23.90	25.33	27.20	28.46	30.14	32.85	36.19	38.58	43.82	45.97
20	5.398	5.921	7.434	8.260	9.591	10.85	11.73	12.44	13.60	14.58	16.27	17.81	19.34	20.95	22.77	25.04	26.50	28.41	29.69	31.41	34.17	37.57	40.00	45.31	47.50
21	5.895	6.447	8.034	8.897	10.28	11.59	12.50	13.24	14.44	15.44	17.18	18.77	20.34	21.99	23.86	26.17	27.66	29.62	30.92	32.67	35.48	38.93	41.40	46.80	49.01
22	6.404	6.983	8.643	9.542	10.98	12.34	13.28	14.04	15.28	16.31	18.10	19.73	21.34	23.03	24.94	27.30	28.82	30.81	32.14	33.92	36.78	40.29	42.80	48.27	50.51
23	6.924	7.529	9.260	10.20	11.69	13.09	14.06	14.85	16.12	17.19	19.02	20.69	22.34	24.07	26.02	28.43	29.98	32.01	33.36	35.17	38.08	41.64	44.18	49.73	52.00
24	7.453	8.085	9.886	10.86	12.40	13.85	14.85	15.66	16.97	18.06	19.94	21.65	23.34	25.11	27.10	29.55	31.13	33.28	34.57	36.42	39.36	42.98	45.56	51.18	53.48
25	7.991	8.649	10.52	11.52	13.12	14.61	15.64	16.47	17.82	18.94	20.87	22.62	24.34	26.14	28.17	30.68	32.28	34.38	35.78	37.65	40.65	44.31	46.93	52.62	54.95
26	8.537	9.222	11.16	12.20	13.84	15.38	16.44	17.29	18.67	19.82	21.79	23.58	25.34	27.18	29.25	31.79	33.43	35.56	36.98	38.89	41.92	45.64	48.29	54.05	56.41
27	9.093	9.803	11.81	12.88	14.57	16.15	17.24	18.11	19.53	20.70	22.72	24.54	26.34	28.21	30.32	32.91	34.57	36.74	38.18	40.11	43.19	46.96	49.65	55.48	57.86
28	9.656	10.39	12.46	13.56	15.31	16.93	18.05	18.94	20.39	21.59	23.65	25.51	27.34	29.25	31.39	34.03	35.71	37.92	39.38	41.34	44.46	48.28	50.99	56.89	59.30
29	10.23	10.99	13.12	14.26	16.05	17.71	18.85	19.77	21.25	22.48	24.58	26.48	28.34	30.28	32.46	35.14	36.85	39.09	40.57	42.56	45.72	49.59	52.34	58.30	60.73
30	10.80	11.59	13.79	14.95	16.79	18.49	19.66	20.60	22.11	23.36	25.51	27.44	29.34	31.32	33.53	36.25	37.99	40.26	41.76	43.77	46.98	50.89	53.67	59.70	62.16
31	11.39	12.20	14.46	15.66	17.54	19.28	20.48	21.43	22.98	24.26	26.44	28.41	30.34	32.35	34.60	37.36	39.12	41.42	42.95	44.99	48.23	52.19	55.00	61.10	63.58
32	11.98	12.81	15.13	16.36	18.29	20.07	21.30	22.27	23.84	25.15	27.37	29.38	31.34	33.38	35.66	38.47	40.26	42.58	44.13	46.19	49.48	53.49	56.33	62.49	64.99
33	12.58	13.43	15.82	17.07	19.05	20.87	22.12	23.11	24.71	26.04	28.31	30.34	32.34	34.41	36.73	39.57	41.39	43.75	45.31	47.40	50.73	54.78	57.65	63.87	66.40
34	13.18	14.06	16.50	17.79	19.81	21.66	22.94	23.95	25.59	26.94	29.24	31.31	33.34	35.44	37.80	40.68	42.51	44.90	46.49	48.60	51.97	56.06	58.96	65.25	67.80
35	13.79	14.69	17.19	18.51	20.57	22.47	23.76	24.80	26.46	27.84	30.18	32.28	34.34	36.47	38.86	41.78	43.64	46.06	47.66	49.80	53.20	57.34	60.27	66.62	69.20
36	14.40	15.32	17.89	19.23	21.34	23.27	24.59	25.64	27.34	28.73	31.12	33.25	35.34	37.50	39.92	42.88	44.76	47.21	48.84	51.00	54.44	58.62	61.58	67.98	70.59
37	15.02	15.97	18.59	19.96	22.11	24.07	25.42	26.49	28.21	29.64	32.05	34.22	36.34	38.53	40.98	43.98	45.89	48.36	50.01	52.19	55.67	59.89	62.88	69.35	71.97
38	15.64	16.61	19.29	20.69	22.88	24.88	26.25	27.34	29.09	30.54	32.99	35.19	37.34	39.56	42.05	45.08	47.01	49.51	51.17	53.38	56.90	61.16	64.18	70.70	73.35
39	16.27	17.26	20.00	21.43	23.65	25.70	27.09	28.20	29.97	31.44	33.93	36.16	38.34	40.59	43.11	46.17	48.13	50.66	52.34	54.57	58.12	62.43	65.48	72.06	74.72
40	16.91	17.92	20.71	22.16	24.43	26.51	27.93	29.05	30.86	32.34	34.87	37.13	39.34	41.62	44.16	47.27	49.24	51.81	53.50	55.76	59.34	63.69	66.77	73.40	76.10
50	23.46	24.67	27.99	29.71	32.36	34.76	36.40	37.69	39.75	41.45	44.31	46.86	49.33	51.89	54.72	58.16	60.35	63.17	65.03	67.50	71.42	76.15	79.49	86.66	89.56
60	30.34	31.74	35.53	37.48	40.48	43.19	45.02	46.46	48.76	50.64	53.81	56.62	59.33	62.13	65.23	68.97	71.34	74.40	76.41	79.08	83.30	88.38	91.95	99.61	102.7
70	37.47	39.04	43.28	45.44	48.76	51.74	53.75	55.33	57.84	59.90	63.35	66.40	69.33	72.36	75.69	79.71	82.26	85.53	88.68	90.53	95.02	100.4	104.2	112.3	115.6
80	44.79	46.52	51.17	53.54	57.15	60.39	62.57	64.82	66.99	69.21	72.92	76.19	79.33	82.57	86.12	90.41	93.11	96.58	98.86	101.9	106.6	112.3	116.3	124.8	128.3
90	52.28	54.16	59.20	61.75	65.65	69.13	71.46	73.29	76.20	78.56	82.51	85.99	89.33	92.76	96.52	101.1	103.9	107.6	110.0	113.1	118.1	124.1	128.3	137.2	140.8
100	59.89	61.76	67.33	70.06	74.22	77.93	80.41	82.36	85.44	87.95	92.13	95.81	99.33	102.9	106.9	111.7	11								