

TABELA 1 – DISTRIBUIÇÃO BINOMIAL

A. Função probabilidade

$$f(x | \theta) = P(X = x) = \binom{n}{x} \theta^x (1 - \theta)^{n-x}$$

		θ									
n	x	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50
1	0	.9500	.9000	.8500	.8000	.7500	.7000	.6500	.6000	.5500	.5000
1	1	.0500	.1000	.1500	.2000	.2500	.3000	.3500	.4000	.4500	.5000
2	0	.9025	.8100	.7225	.6400	.5625	.4900	.4225	.3600	.3025	.2500
2	1	.0950	.1800	.2550	.3200	.3750	.4200	.4550	.4800	.4950	.5000
2	2	.0025	.0100	.0225	.0400	.0625	.0900	.1225	.1600	.2025	.2500
3	0	.8574	.7290	.6141	.5120	.4219	.3430	.2746	.2160	.1664	.1250
3	1	.1354	.2430	.3251	.3840	.4219	.4410	.4436	.4320	.4084	.3750
3	2	.0071	.0270	.0574	.0960	.1406	.1890	.2389	.2880	.3341	.3750
3	3	.0001	.0010	.0034	.0080	.0156	.0270	.0429	.0640	.0911	.1250
4	0	.8145	.6561	.5220	.4096	.3164	.2401	.1785	.1296	.0915	.0625
4	1	.1715	.2916	.3685	.4096	.4219	.4116	.3845	.3456	.2995	.2500
4	2	.0135	.0486	.0975	.1536	.2109	.2646	.3105	.3456	.3675	.3750
4	3	.0005	.0036	.0115	.0256	.0469	.0756	.1115	.1536	.2005	.2500
4	4	.0000	.0001	.0005	.0016	.0039	.0081	.0150	.0256	.0410	.0625
5	0	.7738	.5905	.4437	.3277	.2373	.1681	.1160	.0778	.0503	.0313
5	1	.2036	.3281	.3915	.4096	.3955	.3602	.3124	.2592	.2059	.1563
5	2	.0214	.0729	.1382	.2048	.2637	.3087	.3364	.3456	.3369	.3125
5	3	.0011	.0081	.0244	.0512	.0879	.1323	.1811	.2304	.2757	.3125
5	4	.0000	.0005	.0022	.0064	.0146	.0284	.0488	.0768	.1128	.1563
5	5	.0000	.0000	.0001	.0003	.0010	.0024	.0053	.0102	.0185	.0313
6	0	.7351	.5314	.3771	.2621	.1780	.1176	.0754	.0467	.0277	.0156
6	1	.2321	.3543	.3993	.3932	.3560	.3025	.2437	.1866	.1359	.0938
6	2	.0305	.0984	.1762	.2458	.2966	.3241	.3280	.3110	.2780	.2344
6	3	.0021	.0146	.0415	.0819	.1318	.1852	.2355	.2765	.3032	.3125
6	4	.0001	.0012	.0055	.0154	.0330	.0595	.0951	.1382	.1861	.2344
6	5	.0000	.0001	.0004	.0015	.0044	.0102	.0205	.0369	.0609	.0938
6	6	.0000	.0000	.0000	.0001	.0002	.0007	.0018	.0041	.0083	.0156
7	0	.6983	.4783	.3206	.2097	.1335	.0824	.0490	.0280	.0152	.0078
7	1	.2573	.3720	.3960	.3670	.3115	.2471	.1848	.1306	.0872	.0547
7	2	.0406	.1240	.2097	.2753	.3115	.3177	.2985	.2613	.2140	.1641
7	3	.0036	.0230	.0617	.1147	.1730	.2269	.2679	.2903	.2918	.2734

B. Função de distribuição

$$F(x | \theta) = P(X \leq x) = \sum_{i=0}^x \binom{n}{i} \theta^i (1 - \theta)^{n-i}$$

		θ									
n	x	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50
1	0	.9500	.9000	.8500	.8000	.7500	.7000	.6500	.6000	.5500	.5000
1	1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0	.9025	.8100	.7225	.6400	.5625	.4900	.4225	.3600	.3025	.2500
2	1	.9975	.9900	.9775	.9600	.9375	.9100	.8775	.8400	.7975	.7500
2	2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	0	.8574	.7290	.6141	.5120	.4219	.3430	.2746	.2160	.1664	.1250
3	1	.9928	.9720	.9393	.8960	.8438	.7840	.7183	.6480	.5748	.5000
3	2	.9999	.9990	.9966	.9920	.9844	.9730	.9571	.9360	.9089	.8750
3	3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
4	0	.8145	.6561	.5220	.4096	.3164	.2401	.1785	.1296	.0915	.0625
4	1	.9860	.9477	.8905	.8192	.7383	.6517	.5630	.4752	.3910	.3125
4	2	.9995	.9963	.9880	.9728	.9492	.9163	.8735	.8208	.7585	.6875
4	3	1.0000	.9999	.9995	.9984	.9961	.9919	.9850	.9744	.9590	.9375
4	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5	0	.7738	.5905	.4437	.3277	.2373	.1681	.1160	.0778	.0503	.0313
5	1	.9774	.9185	.8352	.7373	.6328	.5282	.4284	.3370	.2562	.1875
5	2	.9988	.9914	.9734	.9421	.8965	.8369	.7648	.6826	.5931	.5000
5	3	1.0000	.9995	.9978	.9933	.9844	.9692	.9460	.9130	.8688	.8125
5	4	1.0000	1.0000	.9999	.9997	.9990	.9976	.9947	.9898	.9815	.9688
5	5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6	0	.7351	.5314	.3771	.2621	.1780	.1176	.0754	.0467	.0277	.0156
6	1	.9672	.8857	.7765	.6554	.5339	.4202	.3191	.2333	.1636	.1094
6	2	.9978	.9842	.9527	.9011	.8306	.7443	.6471	.5443	.4415	.3438
6	3	.9999	.9987	.9941	.9830	.9624	.9295	.8826	.8208	.7447	.6563
6	4	1.0000	.9999	.9996	.9984	.9954	.9891	.9777	.9590	.9308	.8906
6	5	1.0000	1.0000	1.0000	.9999	.9998	.9993	.9982	.9959	.9917	.9844
6	6	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7	0	.6983	.4783	.3206	.2097	.1335	.0824	.0490	.0280	.0152	.0078
7	1	.9556	.8503	.7166	.5767	.4449	.3294	.2338	.1586	.1024	.0625
7	2	.9962	.9743	.9262	.8520	.7564	.6471	.5323	.4199	.3164	.2266
7	3	.9998	.9973	.9879	.9667	.9294	.8740	.8002	.7102	.6083	.5000

TABELA 1 – DISTRIBUIÇÃO BINOMIAL (Continuação)

A. Função probabilidade

n	x	θ									
		.05	.10	.15	.20	.25	.30	.35	.40	.45	.50
11	0	.5688	.3138	.1673	.0859	.0422	.0198	.0088	.0036	.0014	.0005
1	1	.3293	.3835	.3248	.2362	.1549	.0932	.0518	.0266	.0125	.0054
2	2	.0867	.2131	.2866	.2953	.2581	.1998	.1395	.0887	.0513	.0269
3	3	.0137	.0710	.1517	.2215	.2581	.2568	.2254	.1774	.1259	.0806
4	4	.0014	.0158	.0536	.1107	.1721	.2201	.2428	.2365	.2060	.1611
5	5	.0001	.0025	.0132	.0388	.0803	.1321	.1830	.2207	.2360	.2256
6	6	.0000	.0003	.0023	.0097	.0268	.0566	.0985	.1471	.1931	.2256
7	7	.0000	.0000	.0003	.0017	.0064	.0173	.0379	.0701	.1128	.1611
8	8	.0000	.0000	.0000	.0002	.0011	.0037	.0102	.0234	.0462	.0806
9	9	.0000	.0000	.0000	.0000	.0001	.0005	.0018	.0052	.0126	.0269
10	10	.0000	.0000	.0000	.0000	.0000	.0000	.0002	.0007	.0021	.0054
11	11	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0002	.0005
12	0	.5404	.2824	.1422	.0687	.0317	.0138	.0057	.0022	.0008	.0002
1	1	.3413	.3766	.3012	.2062	.1267	.0712	.0368	.0174	.0075	.0029
2	2	.0988	.2301	.2924	.2835	.2323	.1678	.1088	.0639	.0339	.0161
3	3	.0173	.0852	.1720	.2362	.2581	.2397	.1954	.1419	.0923	.0537
4	4	.0021	.0213	.0683	.1329	.1936	.2311	.2367	.2128	.1700	.1208
5	5	.0002	.0038	.0193	.0532	.1032	.1585	.2039	.2270	.2225	.1934
6	6	.0000	.0005	.0040	.0155	.0401	.0792	.1281	.1766	.2124	.2256
7	7	.0000	.0000	.0006	.0033	.0115	.0291	.0591	.1009	.1489	.1934
8	8	.0000	.0000	.0001	.0005	.0024	.0078	.0199	.0420	.0762	.1208
9	9	.0000	.0000	.0000	.0001	.0004	.0015	.0048	.0125	.0277	.0537
10	10	.0000	.0000	.0000	.0000	.0000	.0002	.0008	.0025	.0068	.0161
11	11	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0003	.0010	.0029
12	12	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0002
13	0	.5133	.2542	.1209	.0550	.0238	.0097	.0037	.0013	.0004	.0001
1	1	.3512	.3672	.2774	.1787	.1029	.0540	.0259	.0113	.0045	.0016
2	2	.1109	.2448	.2937	.2680	.2059	.1388	.0836	.0453	.0220	.0095
3	3	.0214	.0997	.1900	.2457	.2517	.2181	.1651	.1107	.0660	.0349
4	4	.0028	.0277	.0838	.1535	.2097	.2337	.2222	.1845	.1350	.0873
5	5	.0003	.0055	.0266	.0691	.1258	.1803	.2154	.2214	.1989	.1571
6	6	.0000	.0008	.0063	.0230	.0559	.1030	.1546	.1968	.2169	.2095
7	7	.0000	.0001	.0011	.0058	.0186	.0442	.0833	.1312	.1775	.2095
8	8	.0000	.0000	.0001	.0011	.0047	.0142	.0336	.0656	.1089	.1571
9	9	.0000	.0000	.0000	.0001	.0009	.0034	.0101	.0243	.0495	.0873

B. Função de distribuição

N	x	θ									
		.05	.10	.15	.20	.25	.30	.35	.40	.45	.50
11	0	.5688	.3138	.1673	.0859	.0422	.0198	.0088	.0036	.0014	.0005
1	1	.8981	.6974	.4922	.3221	.1971	.1130	.0606	.0302	.0139	.0059
2	2	.9848	.9104	.7788	.6174	.4552	.3127	.2001	.1189	.0652	.0327
3	3	.9984	.9815	.9306	.8389	.7133	.5696	.4256	.2963	.1911	.1133
4	4	.9999	.9972	.9841	.9496	.8854	.7897	.6683	.5328	.3971	.2744
5	5	1.0000	.9997	.9973	.9883	.9657	.9218	.8513	.7535	.6331	.5000
6	6	1.0000	1.0000	.9997	.9980	.9924	.9784	.9499	.9006	.8262	.7256
7	7	1.0000	1.0000	1.0000	.9998	.9988	.9957	.9878	.9707	.9390	.8867
8	8	1.0000	1.0000	1.0000	1.0000	.9999	.9994	.9980	.9941	.9852	.9673
9	9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	.9998	.9993	.9978	.9941
10	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	.9998	.9995
11	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	0	.5404	.2824	.1422	.0687	.0317	.0138	.0057	.0022	.0008	.0002
1	1	.8816	.6590	.4435	.2749	.1584	.0850	.0424	.0196	.0083	.0032
2	2	.9804	.8891	.7358	.5583	.3907	.2528	.1513	.0834	.0421	.0193
3	3	.9978	.9744	.9078	.7946	.6488	.4925	.3467	.2253	.1345	.0730
4	4	.9998	.9957	.9761	.9274	.8424	.7237	.5833	.4382	.3044	.1938
5	5	1.0000	.9995	.9954	.9806	.9456	.8822	.7873	.6652	.5269	.3872
6	6	1.0000	.9999	.9993	.9961	.9857	.9614	.9154	.8418	.7393	.6128
7	7	1.0000	1.0000	.9999	.9994	.9972	.9905	.9745	.9427	.8883	.8062
8	8	1.0000	1.0000	1.0000	.9999	.9996	.9983	.9944	.9847	.9644	.9270
9	9	1.0000	1.0000	1.0000	1.0000	1.0000	.9998	.9992	.9972	.9921	.9807
10	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	.9999	.9997	.9989	.9968
11	11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	.9999	.9998
12	12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13	0	.5133	.2542	.1209	.0550	.0238	.0097	.0037	.0013	.0004	.0001
1	1	.8646	.6213	.3983	.2336	.1267	.0637	.0296	.0126	.0049	.0017
2	2	.9755	.8661	.6920	.5017	.3326	.2025	.1132	.0579	.0269	.0112
3	3	.9969	.9658	.8820	.7473	.5843	.4206	.2783	.1686	.0929	.0461
4	4	.9997	.9935	.9658	.9009	.7940	.6543	.5005	.3530	.2279	.1334
5	5	1.0000	.9991	.9925	.9700	.9198	.8346	.7159	.5744	.4268	.2905
6	6	1.0000	.9999	.9987	.9930	.9757	.9376	.8705	.7712	.6437	.5000
7	7	1.0000	1.0000	.9998	.9988	.9944	.9818	.9538	.9023	.8212	.7095
8	8	1.0000	1.0000	1.0000	.9998	.9990	.9960	.9874	.9679	.9302	.8666
9	9	1.0000	1.0000	1.0000	1.0000	.9999	.9993	.9975	.9922	.9797	.9539

