TABLAS.

Binomial.

Poisson.

Normal.

χ^2 de Pearson.

t de Student.

F de Snedecor (1).

F de Snedecor (2).

F de Snedecor (3).

F de Snedecor (4).

Test de Kolgomorov-Smirnov.

Test de rachas.

DISTRIBUCIÓN BINOMIAL B(n,p)

		p	0.1	0.2	0.3	0.4	0.5
n	X				f(X)		
2	0		.8100	.6400	.4900	.3600	.2500
	1		.1800	.3200	.4200	.4800	.5000
	2		.0100	.0400	.0900	.1600	.2500
3	0		.7290	.5120	.3430	.2160	.1250
	1		.2430	.3840	.4410	.4320	.3750
	2		.0270	.0960	.1890	.2880	.3750
	3		.0010	.0080	.0270	.0640	.1250
4	0		.6567	.4096	.2401	.1296	.0625
	1		.2916	.4096	.4116	.3456	.2500
	2		.0486	.1536	.2646	.3456	.3750
	3		.0036	..0256	.0756	1536	.2500
	4		.0001	.0016	.0081	.0256	.0625
5	0		.5905	.3277	.1681	.0778	.0312
	1		.3280	.4096	.3602	.2592	.1562
	2		.0729	.2048	.3087	.3456	.3125
	3		.0081	.0512	.1323	.2304	.3125
	4		.0005	.0064	.0284	.0768	.1562
	5		.0000	.0003	.0024	.0102	.0312
6	0		.5314	.2621	.1176	.0467	.0156
	1		.3543	.3932	.3025	.1866	.0938
	2		.0984	.2458	.3241	.3110	.2344
	3		.0146	.0819	.1852	.2765	.3125
	4		.0012	.0154	.0595	.1382	.2344
	5		.0001	.0015	.0102	.0369	.0938
	6		.0000	.0001	.0007	.0041	.0155
7	0		.4783	.2097	.0824	.0280	.0078
	1		.3720	.3670	.2471	.1306	.0547
	2		.1240	.2753	.3176	.2613	.1641
	3		.0230	.1147	.2269	.2903	.2734
	4		.0026	.0287	.0972	.1935	.2734
	5		.0001	.0043	.0250	.0774	.1641
	6		.0000	.0004	.0036	.0172	.0547
	7			.0000	.0002	.0016	.0078
8	0		.4305	.1678	.0576	.0168	.0039
	1		.3826	.3355	.1977	.0896	.0312
	2		.1488	.2936	.2965	.2090	.1094
	3		.0331	.1468	.2541	.2787	.2188
	4		.0046	.0459	.1361	.2322	.2734
	5		.0004	.0092	.0467	.1239	.2188
	6		.0000	.0011	.0100	.0413	.1094
	7			.0001	.0012	.0078	.0312
	8			.0000	.0001	.0007	.0039
9	0		.3874	.1342	.0404	.0101	.0020
	1		.3874	.3020	.1556	.0605	.0176
	2		.1722	.3020	.2668	.1612	.0703
	3		.0446	.1762	.2668	.2508	.1641
	4		.0074	.0661	.1715	.2508	.2461
	5		.0008	.0165	.0735	.1672	.2461
	6		.0001	.0028	.0210	.0743	.1641
	7		.0000	.0002	.0039	.0212	.0703
	8			.0000	.0005	.0035	.0176
	9				.0000	.0003	.0018

		p	0.1	0.2	0.3	0.4	0.5
n	X				f(X)		
10	0		.3487	.1074	.0282	.0060	.0010
	1		.3874	.2684	.1211	.0403	.0098
	2		.1937	.3020	.2335	.1209	.0439
	3		.0574	.2013	.2668	.2150	.1172
	4		.0112	.0881	.2001	.2508	.2051
	5		.0015	.0264	.1029	.2007	.2461
	6		.0001	.0055	.0368	.1115	.2051
	7		.0000	.0008	.0090	.0425	.1172
	8			.0001	.0014	.0106	.0439
	9			.0000	.0001	.0016	.0098
	10				.0000	.0001	.0010
15	0		.2059	.0352	.0047	.0005	.0000
	1		.3432	.1319	.0305	.0047	.0005
	2		.2669	.2309	.0916	.0219	.0032
	3		.1285	.2501	.1700	.0634	.0139
	4		.0428	.1876	.2186	.1268	.0417
	5		.0105	.1032	.2061	.1859	.0916
	6		.0019	.0430	.1472	.2066	.1527
	7		.0003	.0138	.0811	.1771	.1964
	8		.0000	.0035	.0348	.1181	.1964
	9			.0007	.0116	.0612	.1527
	10			.0001	.0030	.0245	.0916
	11			.0000	.0006	.0074	.0417
	12				.0001	.0016	.0139
	13				.0000	.0003	.0032
	14					.0000	.0005
	15						.0000
20	0		.1216	.0115	.0008	.0000	
	1		.2701	.0576	.0068	.0005	.0000
	2		.2852	.1369	.0278	.0031	.0002
	3		.1901	.2054	.0716	.0123	.0011
	4		.0898	.2182	.1304	.0350	.0046
	5		.0319	.1746	.1789	.0746	.0148
	6		.0089	.1091	.1916	.1244	.0370
	7		.0020	.0545	.1643	.1659	.0739
	8		.0003	.0222	.1144	.1797	.1201
	9		.0001	.0074	.0654	.1597	.1602
	10		.0000	.0020	.0308	.1171	.1762
	11			.0005	.0120	.0710	.1602
	12			.0001	.0039	.0355	.1201
	13			.0000	.0010	.0146	.0739
	14				.0002	.0049	.0370
	15				.0000	.0013	.0148
	16					.0003	.0046
	17					.0000	.0011
	18						.0002
	19						.0000
	20						

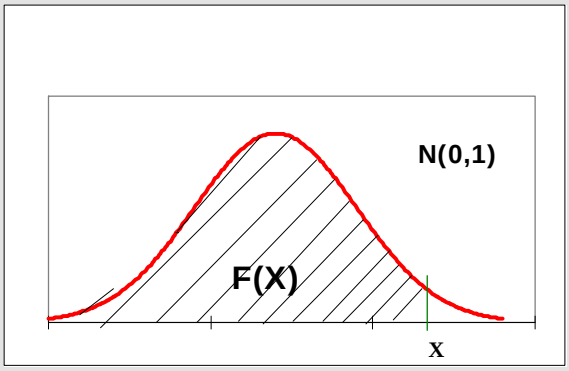
$$f(X) = \binom{n}{X} p^{X} (1-p)^{n-X}$$

DISTRIBUCIÓN POISSON $\mathcal{P}(\lambda)$

X \ λ	.1	.2	.3	.4	.5	.6	.7	.8	.9	1	1.5	2	3	4	5	6	7	8	9	10
										f(X)										
0	.9048	.8187	.7408	.6703	.6065	.5488	.4966	.4493	.4066	.3679	.2231	.1353	.0498	.0183	.0067	.0025	.0009	.0003	.0001	.0000
1	.0905	.1637	.2222	.2681	.3033	.3293	.3476	.3595	.3659	.3679	.3347	.2707	.1494	.0733	.0337	.0149	.0064	.0027	.0011	.0005
2	.0045	.0164	.0333	.0536	.0758	.0988	.1217	.1438	.1647	.1839	.2510	.2707	.2240	.1465	.0842	.0446	.0223	.0107	.0050	.0023
3	.0002	.0011	.0033	.0072	.0126	.0198	.0284	.0383	.0494	.0613	.1255	.1804	.2240	.1954	.1404	.0892	.0521	.0286	.0150	.0076
4	.0000	.0001	.0003	.0007	.0016	.0030	.0050	.0077	.0111	.0153	.0471	.0902	.1680	.1954	.1755	.1339	.0912	.0573	.0337	.0189
5		.0000	.0000	.0001	.0002	.0004	.0007	.0012	.0020	.0031	.0141	.0361	.1008	.1563	.1755	.1606	.1277	.0916	.0607	.0378
6				.0000	.0000	.0000	.0001	.0002	.0003	.0005	.0035	.0120	.0504	.1042	.1462	.1606	.1490	.1221	.0911	.0631
7							.0000	.0000	.0000	.0001	.0008	.0034	.0216	.0595	.1044	.1377	.1490	.1396	.1171	.0901
8										.0000	.0001	.0009	.0081	.0298	.0653	.1033	.1304	.1396	.1318	.1126
9											.0000	.0002	.0027	.0132	.0363	.0688	.1014	.1241	.1318	.1251
10												.0000	.0008	.0053	.0181	.0413	.0710	.0993	.1186	.1251
11													.0002	.0019	.0082	.0225	.0452	.0722	.0970	.1137
12													.0001	.0006	.0034	.0113	.0264	.0481	.0728	.0948
13													.0000	.0002	.0013	.0052	.0142	.0296	.0504	.0729
14														.0001	.0005	.0022	.0071	.0169	.0324	.0521
15														.0000	.0002	.0009	.0033	.0090	.0194	.0347
16															.0000	.0003	.0014	.0045	.0109	.0217
17																.0001	.0006	.0021	.0058	.0128
18																.0000	.0002	.0009	.0029	.0071
19																	.0001	.0004	.0014	.0037
20																	.0000	.0002	.0006	.0019
21																		.0001	.0003	.0009
22																		.0000	.0001	.0004
23																			.0000	.0002
24																				.0001
25																				.0000

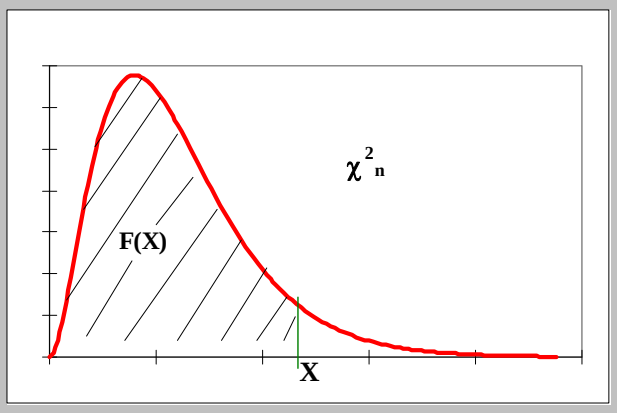
$$f(X) = \frac{\lambda^{X} e^{-\lambda}}{X!}$$

FUNCION DE DISTRIBUCIÓN N(0,1)



X	F(X)	X	F(X)	X	F(X)	X	F(X)	X	F(X)	X	F(X)	X	F(X)
0.00	0.5	0.43	0.6664	0.86	0.8051	1.29	0.9015	1.72	0.9573	2.15	0.9842	2.66	0.9961
0.01	0.5040	0.44	0.6700	0.87	0.8079	1.30	0.9032	1.73	0.9582	2.16	0.9846	2.68	0.9963
0.02	0.5080	0.45	0.6736	0.88	0.8106	1.31	0.9049	1.74	0.9591	2.17	0.9850	2.70	0.9965
0.03	0.5120	0.46	0.6772	0.89	0.8133	1.32	0.9066	1.75	0.9599	2.18	0.9854	2.72	0.9967
0.04	0.5160	0.47	0.6808	0.90	0.8159	1.33	0.9082	1.76	0.9608	2.19	0.9857	2.74	0.9969
0.05	0.5199	0.48	0.6844	0.91	0.8186	1.34	0.9099	1.77	0.9616	2.20	0.9861	2.76	0.9971
0.06	0.5239	0.49	0.6879	0.92	0.8212	1.35	0.9115	1.78	0.9625	2.21	0.9864	2.78	0.9973
0.07	0.5279	0.50	0.6915	0.93	0.8238	1.36	0.9131	1.79	0.9633	2.22	0.9868	2.80	0.9974
0.08	0.5319	0.51	0.6950	0.94	0.8264	1.37	0.9147	1.80	0.9641	2.23	0.9871	2.82	0.9976
0.09	0.5359	0.52	0.6985	0.95	0.8289	1.38	0.9162	1.81	0.9649	2.24	0.9875	2.84	0.9977
0.10	0.5398	0.53	0.7019	0.96	0.8315	1.39	0.9177	1.82	0.9656	2.25	0.9878	2.86	0.9979
0.11	0.5438	0.54	0.7054	0.97	0.8340	1.40	0.9192	1.83	0.9664	2.26	0.9881	2.88	0.9980
0.12	0.5478	0.55	0.7088	0.98	0.8365	1.41	0.9207	1.84	0.9671	2.27	0.9884	2.90	0.9981
0.13	0.5517	0.56	0.7123	0.99	0.8389	1.42	0.9222	1.85	0.9678	2.28	0.9887	2.92	0.9983
0.14	0.5557	0.57	0.7157	1.00	0.8413	1.43	0.9236	1.86	0.9686	2.29	0.9890	2.94	0.9984
0.15	0.5596	0.58	0.7190	1.01	0.8437	1.44	0.9251	1.87	0.9693	2.30	0.9893	2.96	0.9985
0.16	0.5636	0.59	0.7224	1.02	0.8461	1.45	0.9265	1.88	0.9699	2.31	0.9896	2.98	0.9986
0.17	0.5675	0.60	0.7257	1.03	0.8485	1.46	0.9279	1.89	0.9706	2.32	0.9898	3.00	0.9987
0.18	0.5714	0.61	0.7291	1.04	0.8508	1.47	0.9292	1.90	0.9713	2.33	0.9901	3.05	0.9989
0.19	0.5753	0.62	0.7324	1.05	0.8531	1.48	0.9306	1.91	0.9719	2.34	0.9904	3.10	0.9990
0.20	0.5793	0.63	0.7357	1.06	0.8554	1.49	0.9319	1.92	0.9726	2.35	0.9906	3.15	0.9992
0.21	0.5832	0.64	0.7389	1.07	0.8577	1.50	0.9332	1.93	0.9732	2.36	0.9909	3.20	0.9993
0.22	0.5871	0.65	0.7422	1.08	0.8599	1.51	0.9345	1.94	0.9738	2.37	0.9911	3.25	0.9994
0.23	0.5910	0.66	0.7454	1.09	0.8621	1.52	0.9357	1.95	0.9744	2.38	0.9913	3.30	0.9995
0.24	0.5948	0.67	0.7486	1.10	0.8643	1.53	0.9370	1.96	0.9750	2.39	0.9916	3.35	0.9996
0.25	0.5987	0.68	0.7517	1.11	0.8665	1.54	0.9382	1.97	0.9756	2.40	0.9918	3.40	0.9997
0.26	0.6026	0.69	0.7549	1.12	0.8686	1.55	0.9394	1.98	0.9761	2.41	0.9920	3.45	0.9997
0.27	0.6064	0.70	0.7580	1.13	0.8708	1.56	0.9406	1.99	0.9767	2.42	0.9922	3.50	0.9998
0.28	0.6103	0.71	0.7611	1.14	0.8729	1.57	0.9418	2.00	0.9773	2.43	0.9925	3.55	0.9998
0.29	0.6141	0.72	0.7642	1.15	0.8749	1.58	0.9429	2.01	0.9778	2.44	0.9927	3.60	0.9998
0.30	0.6179	0.73	0.7673	1.16	0.8770	1.59	0.9441	2.02	0.9783	2.45	0.9929	3.65	0.9999
0.31	0.6217	0.74	0.7704	1.17	0.8790	1.60	0.9452	2.03	0.9788	2.46	0.9931	3.70	0.9999
0.32	0.6255	0.75	0.7734	1.18	0.8810	1.61	0.9463	2.04	0.9793	2.47	0.9932	3.75	0.9999
0.33	0.6293	0.76	0.7764	1.19	0.8830	1.62	0.9474	2.05	0.9798	2.48	0.9934	3.80	0.9999
0.34	0.6331	0.77	0.7794	1.20	0.8849	1.63	0.9485	2.06	0.9803	2.49	0.9936	3.85	0.9999
0.35	0.6368	0.78	0.7823	1.21	0.8869	1.64	0.9495	2.07	0.9808	2.50	0.9938	3.90	1.0000
0.36	0.6406	0.79	0.7852	1.22	0.8888	1.65	0.9505	2.08	0.9812	2.52	0.9941	3.95	1.0000
0.37	0.6443	0.80	0.7881	1.23	0.8907	1.66	0.9515	2.09	0.9817	2.54	0.9945	4.00	1.0000
0.38	0.6480	0.81	0.7910	1.24	0.8925	1.67	0.9525	2.10	0.9821	2.56	0.9948		
0.39	0.6517	0.82	0.7939	1.25	0.8944	1.68	0.9535	2.11	0.9826	2.58	0.9951		
0.40	0.6554	0.83	0.7967	1.26	0.8962	1.69	0.9545	2.12	0.9830	2.60	0.9953		
0.41	0.6591	0.84	0.7995	1.27	0.8980	1.70	0.9554	2.13	0.9834	2.62	0.9956		
0.42	0.6628	0.85	0.8023	1.28	0.8997	1.71	0.9564	2.14	0.9838	2.64	0.9959		

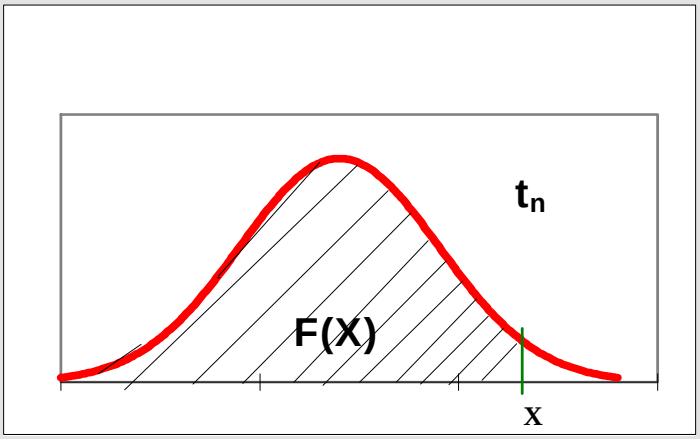
DISTRIBUCIÓN χ^2



F(X)	.005	.01	.025	.05	.10	.20	.25	.30	.40	.50	.60	.70	.75	.80	.90	.95	.975	.99	.995
n								**X**											
1	.0000	.0002	.0010	.0039	.0158	.0642	.1015	.1484	.2750	.4549	.7083	1.074	1.323	1.642	2.706	3.841	5.024	6.635	7.879
2	.0100	.0201	.0506	.1026	.2107	.4463	.5754	.7133	1.022	1.386	1.833	2.408	2.773	3.219	4.605	5.991	7.378	9.210	10.60
3	.0717	.1148	.2158	.3518	.5844	1.005	1.213	1.424	1.869	2.366	2.946	3.665	4.108	4.642	6.251	7.815	9.348	11.34	12.84
4	.2070	.2971	.4844	.7107	1.064	1.649	1.923	2.195	2.753	3.357	4.045	4.878	5.385	5.989	7.779	9.488	11.14	13.28	14.86
5	.4117	.5543	.8312	1.145	1.610	2.343	2.675	3.000	3.655	4.351	5.132	6.064	6.626	7.289	9.236	11.07	12.83	15.09	16.75
6	.6757	.8721	1.237	1.635	2.204	3.070	3.455	3.828	4.570	5.348	6.211	7.231	7.841	8.558	10.64	12.59	14.45	16.81	18.55
7	.9893	1.239	1.690	2.167	2.833	3.822	4.255	4.671	5.493	6.346	7.283	8.383	9.037	9.803	12.02	14.07	16.01	18.48	20.28
8	1.344	1.647	2.180	2.732	3.490	4.594	5.071	5.527	6.423	7.344	8.351	9.524	10.22	11.03	13.36	15.51	17.53	20.09	21.95
9	1.735	2.088	2.700	3.325	4.168	5.380	5.899	6.393	7.357	8.343	9.414	10.66	11.39	12.24	14.68	16.92	19.02	21.67	23.59
10	2.156	2.558	3.247	3.940	4.865	6.179	6.737	7.267	8.295	9.342	10.47	11.78	12.55	13.44	15.99	18.31	20.48	23.21	25.19
11	2.603	3.053	3.816	4.575	5.578	6.989	7.584	8.148	9.237	10.34	11.53	12.90	13.70	14.63	17.27	19.68	21.92	24.72	26.76
12	3.074	3.571	4.404	5.226	6.304	7.807	8.438	9.034	10.18	11.34	12.58	14.01	14.85	15.81	18.55	21.03	23.34	26.22	28.30
13	3.565	4.107	5.009	5.892	7.042	8.634	9.299	9.926	11.13	12.34	13.64	15.12	15.98	16.98	19.81	22.36	24.74	27.69	29.82
14	4.075	4.660	5.629	6.571	7.790	9.467	10.17	10.82	12.08	13.34	14.69	16.22	17.12	18.15	21.06	23.68	26.12	29.14	31.32
15	4.601	5.229	6.262	7.261	8.547	10.31	11.04	11.72	13.03	14.34	15.73	17.32	18.25	19.31	22.31	25.00	27.49	30..58	32.80
16	5.142	5.812	6.908	7.962	9.312	11.15	11.91	12.62	13.98	15.34	16.78	18.42	19.37	20.47	23.54	26.30	28.85	32.00	34.27
17	5.697	6.408	7.564	8.672	10.09	12.00	12.79	13.53	14.94	16.34	17.82	19.51	20.49	21.61	24.77	27.59	30.19	33.41	35.72
18	6.265	7.015	8.231	9.390	10.86	12.86	13.68	14.43	15.89	17.34	18.87	20.60	21.60	22.76	25.99	28.87	31.53	34.81	37.16
19	6.844	7.633	8.907	10.12	11.65	13.72	14.56	15.35	16.85	18.34	19.91	21.69	22.72	23.90	27.20	30.14	32.85	36.19	38.58
20	7.434	8.260	9.591	10.85	12.44	14.58	15.45	16.27	17.81	19.34	20.95	22.77	23.83	25.04	28.41	31.41	34.17	37.57	40.00
21	8.034	8.897	10.28	11.59	13.24	15.44	16.34	17.18	18.77	20.34	21.99	23.86	24.93	26.17	29.62	32.67	35.48	38.93	41.40
22	8.643	9.542	10.98	12.34	14.04	16.31	17.24	18.10	19.73	21.34	23.03	24.94	26.04	27.30	30.81	33.92	36.78	40.29	42.80
23	9.260	10.20	11.69	13.09	14.85	17.19	18.14	19.02	20.69	22.34	24.07	26.02	27.14	28.43	32.01	35.17	38.08	41.64	44.18
24	9.886	10.86	12.40	13.85	15.66	18.06	19.04	19.94	21.65	23.34	25.11	27.10	28.24	29.55	33.20	36.42	39.36	42.98	45.56
25	10.52	11.52	13.12	14.61	16.47	18.94	19.94	20.87	22.62	24.34	26.14	28.17	29.34	30.68	34.38	37.65	40.65	44.31	46.93
30	13.79	14.95	16.79	18.49	20.60	23.36	24.48	25.51	27.44	29.34	31.32	33.53	34.80	36.25	40.26	43.77	46.98	50.89	53.67
40	20.71	22.16	24.43	26.51	29.05	32.34	33.66	34.87	36.16	39.34	41.62	44.16	45.62	47.27	51.81	55.76	59.34	63.69	66.77
50	27.99	29.71	32.36	34.76	37.69	41.45	42.94	44.31	46.86	49.33	51.89	54.72	56.33	58.16	63.17	67.51	71.42	76.15	79.49
60	35.53	37.48	40.48	43.19	46.46	50.64	52.29	53.81	56.62	59.33	62.13	65.23	66.98	68.97	74.40	79.08	83.30	88.38	91.95
70	43.27	45.44	48.76	51.74	55.33	59.90	61.70	63.35	66.40	69.33	72.36	75.69	77.58	79.71	85.53	90.53	95.02	100.4	104.2
80	51.17	53.54	57.15	60.39	64.28	69.21	71.14	72.92	76.19	79.33	82.57	86.12	88.13	90.41	96.58	101.9	106.6	112.3	116.3
90	59.20	61.75	65.65	69.13	73.29	78.56	80.62	82.51	85.99	89.33	92.76	96.52	98.65	101.1	107.6	113.1	118.1	124.1	128.3
100	67.33	70.06	74.22	77.93	82.86	87.95	90.13	92.13	95.81	99.33	102.9	106.9	109.1	111.7	118.5	124.3	129.6	135.8	140.2

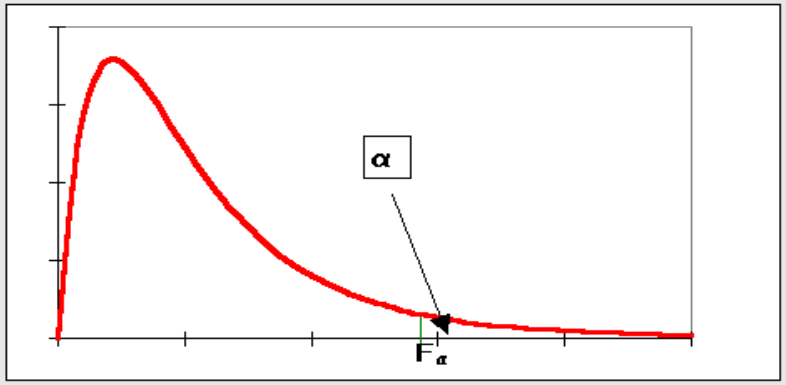
$n > 30 \qquad \chi^2_\alpha = \frac{1}{2}\left(\lambda_\alpha + \sqrt{2n-1}\right)^2 \qquad \lambda_\alpha$ de la N(0,1)

DISTRIBUCIÓN t Student



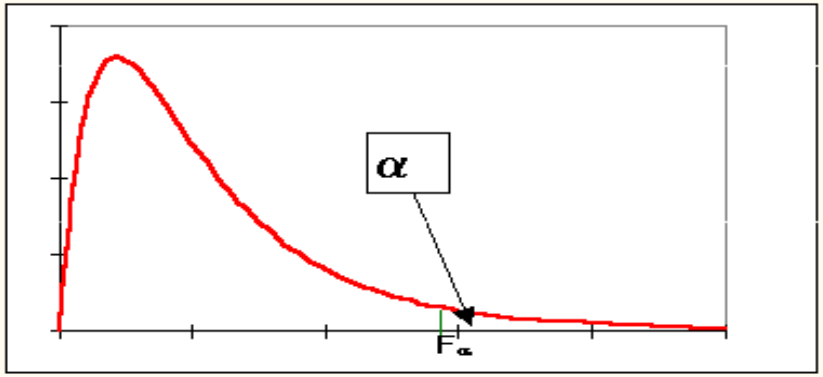
F(X)	.55	.60	.65	.70	.75	.80	.85	.90	.95	.975	.99	.995
n							X					
1	.158	.325	.510	.727	1.000	1.376	1.963	3.078	6.314	12.706	31.821	63.657
2	.142	.289	.445	.617	.816	1.061	1.386	1.886	2.920	4.303	6.965	9.925
3	.137	.277	.424	.584	.765	.978	1.250	1.638	2.353	3.182	4.541	5.841
4	.134	.271	.414	.569	.741	.941	1.190	1.533	2.132	2.776	3.747	4.604
5	.132	.267	.408	.559	.727	.920	1.156	1.476	2.015	2.571	3.365	4.032
6	.131	.265	.404	.553	.718	.906	1.134	1.440	1.943	2.447	3.143	3.707
7	.130	.263	.402	.549	.711	.896	1.119	1.415	1.895	2.365	2.998	3.499
8	.130	.262	.399	.546	.706	.889	1.108	1.397	1.860	2.306	2.896	3.355
9	.129	.261	.398	.543	.703	.883	1.100	1.383	1.833	2.262	2.821	3.250
10	.129	.260	.397	.542	.700	.879	1.093	1.372	1.812	2.228	2.764	3.169
11	.129	.260	.396	.540	.697	.876	1.088	1.363	1.796	2.201	2.718	3.106
12	.128	.259	.395	.539	.695	.873	1.083	1.356	1.782	2.179	2.681	3.055
13	.128	.259	.394	.538	.694	.870	1.079	1.350	1.771	2.160	2.650	3.012
14	.128	.258	.393	.537	.692	.868	1.076	1.345	1.761	2.145	2.624	2.977
15	.128	.258	.393	.536	.691	.866	1.074	1.341	1.753	2.131	2.602	2.947
16	.128	.258	.392	.535	.690	.865	1.071	1.337	1.746	2.120	2.583	2.921
17	.128	.257	.392	.534	.689	.863	1.069	1.333	1.740	2.110	2.567	2.898
18	.127	.257	.392	.534	.688	.862	1.067	1.330	1.734	2.101	2.552	2.878
19	.127	.257	.391	.533	.688	.861	1.066	1.328	1.729	2.093	2.539	2.861
20	.127	.257	.391	.533	.687	.860	1.064	1.325	1.725	2.086	2.528	2.845
21	.127	.257	.391	.532	.686	.859	1.063	1.323	1.721	2.080	2.518	2.831
22	.127	.256	.390	.532	.686	..858	1.061	1.321	1.717	2.074	2.508	2.819
23	.127	.256	.390	.532	.685	.858	1.060	1.319	1.714	2.069	2.500	2.807
24	.127	.256	.390	.531	.685	.857	1.059	1.318	1.711	2.064	2.492	2.797
25	.127	.256	.390	.531	.684	.856	1.058	1.316	1.708	2.060	2.485	2.787
26	.127	.256	.390	.531	.684	.856	1.058	1.315	1.706	2.056	2.479	2.779
27	.127	.256	.389	.531	.684	.855	1.057	1.314	1.703	2.052	2.473	2.771
28	.127	.256	.389	.530	.683	.855	1.056	1.313	1.701	2.048	2.467	2.763
29	.127	.256	.389	.530	.683	.854	1.055	1.311	1.699	2.045	2.462	2.756
30	.127	.256	.389	.530	.683	.854	1.055	1.310	1.697	2.042	2.457	2.750
40	.126	.255	.388	.529	.681	.851	1.050	1.303	1.684	2.021	2.423	2.704
60	.126	.254	.387	.527	.679	.848	1.046	1.296	1.671	2.000	2.390	2.660
120	.126	.254	.386	.526	.677	.845	1.041	1.289	1.658	1.980	2.358	2.617
∞	.126	.253	.385	.524	.674	.842	1.036	1.282	1.645	1.960	2.326	2.576

DISTRIBUCION $F_{m\,n}$ (α = 0,05)



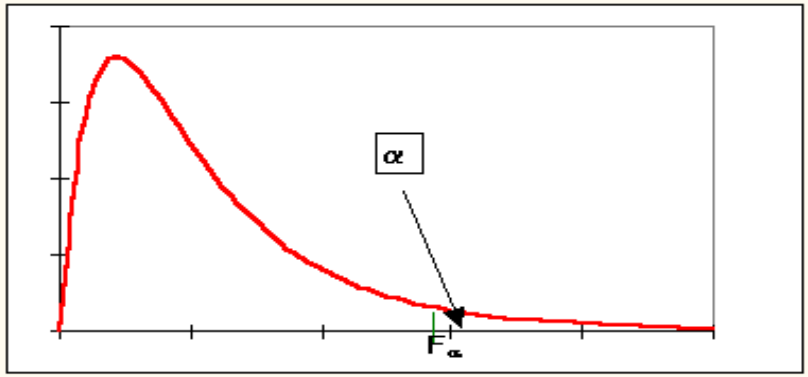
n \ m	1	2	3	4	5	6	7	8	9	10	15	20	30	40	60	120	∞
								F_α									
1	161.4	199.5	215.7	224.6	230.2	234.0	236.8	238.9	240.5	241.9	245.9	248.0	250.1	251.1	252.2	253.3	254.3
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40	19.43	19.45	19.46	19.47	19.48	19.49	19.50
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79	8.70	8.66	8.62	8.59	8.57	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	5.86	5.80	5.75	5.72	5.69	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	4.62	4.56	4.50	4.46	4.43	4.40	4.36
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	3.94	3.87	3.81	3.77	3.74	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	3.51	3.44	3.38	3.34	3.30	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	3.22	3.15	3.08	3.04	3.01	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	3.01	2.94	2.86	2.83	2.79	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	2.85	2.77	2.70	2.66	2.62	2.58	2.54
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59	2.54	2.40	2.33	2.25	2.20	2.16	2.11	2.07
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35	2.20	2.12	2.04	1.99	1.95	1.90	1.84
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16	2.01	1.93	1.84	1.79	1.74	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	1.92	1.84	1.74	1.69	1.64	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	1.84	1.75	1.65	1.59	1.53	1.47	1.39
120	3.92	3.07	2.68	2.45	2.29	2.17	2.09	2.02	1.96	1.91	1.75	1.66	1.55	1.50	1.43	1.35	1.25
∞	3.84	3.00	2.60	2.37	2.21	2.10	2.01	1.94	1.88	1.83	1.67	1.57	1.46	1.39	1.32	1.22	1.00

DISTRIBUCION $F_{m\,n}\,(\alpha = 0{,}025)$



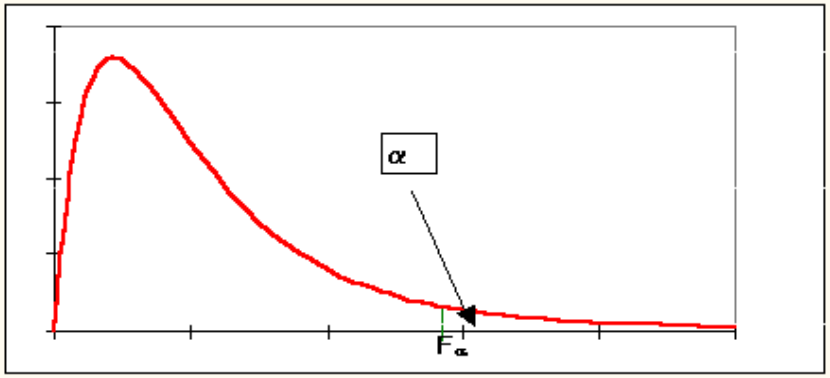
n \ m	1	2	3	4	5	6	7	8	9	10	15	20	30	40	60	120	∞
								F_α									
1	647.8	799.5	864.2	899.6	921.8	937.1	948.2	956.7	963.3	968.6	984.9	993.1	1001	1006	1010	1014	1018
2	38.51	39.00	39.17	39.25	39.30	39.33	39.36	39.37	39.39	39.40	39.43	39.45	39.46	39.47	39.48	39.49	39.50
3	17.44	16.04	15.44	15.10	14.88	14.73	14.62	14.54	14.47	14.42	14.25	14.17	14.08	14.04	13.99	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	8.66	8.56	8.46	8.41	8.36	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	6.43	6.33	6.23	6.18	6.12	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	5.27	5.17	5.07	5.01	4.96	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	4.57	4.47	4.36	4.31	4.25	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	4.10	4.00	3.89	3.84	3.78	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	3.77	3.67	3.56	3.51	3.45	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	3.52	3.42	3.31	3.26	3.20	3.14	3.08
15	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.12	3.06	2.86	2.76	2.64	2.59	2.52	2.46	2.40
20	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.84	2.77	2.57	2.46	2.35	2.29	2.22	2.16	2.09
30	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.57	2.51	2.31	2.20	2.07	2.01	1.94	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	2.18	2.07	1.94	1.88	1.80	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	2.06	1.94	1.82	1.74	1.67	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	1.94	1.82	1.69	1.61	1.53	1.43	1.31
∞	5.02	3.69	3.12	2.79	2.57	2.41	2.29	2.19	2.11	2.05	1.83	1.71	1.57	1.48	1.39	1.27	1.00

DISTRIBUCION $F_{m\,n}$ (α = 0,01)



n \ m	1	2	3	4	5	6	7	8	9	10	15	20	30	40	60	120	∞
								F_α									
1	4052	4999.5	5403	5625	5764	5859	5928	5982	6022	6056	6157	6209	6261	6287	6313	6339	6366
2	98.50	99.00	99.17	99.25	99.30	99.33	99.36	99.37	99.39	99.40	99.43	99.45	99.47	99.47	99.48	99.49	99.50
3	34.12	30.82	29.46	28.71	28.24	27.91	27.67	27.49	27.35	27.23	26.87	26.69	26.50	26.41	26.32	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	14.20	14.02	13.84	13.75	13.65	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	9.72	9.55	9.38	9.29	9.20	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	7.56	7.40	7.23	7.14	7.06	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	6.31	6.16	5.99	5.91	5.82	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	5.52	5.36	5.20	5.12	5.03	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	4.96	4.81	4.65	4.57	4.48	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	4.56	4.41	4.25	4.17	4.08	4.00	3.91
15	8.68	6.36	5.42	4.89	4.56	4.32	4.14	4.00	3.89	3.80	3.52	3.37	3.21	3.13	3.05	2.96	2.87
20	8.10	5.85	4.94	4.43	4.10	3.87	3.70	3.56	3.46	3.37	3.09	2.94	2.78	2.69	2.61	2.52	2.42
30	7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	3.07	2.98	2.70	2.55	2.39	2.30	2.21	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	2.52	2.37	2.20	2.11	2.02	1.92	1.80
60	7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.72	2.63	2.35	2.20	2.03	1.94	1.84	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	2.19	2..03	1.86	1.76	1.66	1.53	1.38
∞	6.63	4.61	3.78	3.32	3.02	2.80	2.64	2.51	2.41	2.32	2.04	1.88	1.70	1.59	1.47	1.32	1.00

DISTRIBUCION F_{mn} (α = 0,005)



n \ m	1	2	3	4	5	6	7	8	9	10	15	20	30	40	60	120	∞
								F_α									
1	16211	20000	21615	22500	23056	23437	23715	23925	24091	24224	24630	24836	25044	25148	25253	25359	25465
2	198.5	199.0	199.2	199.2	199.3	199.3	199.4	199.4	199.4	199.4	199.4	199.4	199.5	199.5	199.5	199.5	199.5
3	55.55	49.80	47.47	46.19	45.39	44.84	44.43	44.13	43.88	43.69	43.08	42.78	42.47	42.31	42.15	41.99	41.83
4	31.33	26.28	24.26	23.15	22.46	21.97	21.62	21.35	21.14	20.97	20.44	20.17	19.89	19.75	19.61	19.47	19.32
5	22.78	18.31	16.53	15.56	14.94	14.51	14.20	13.96	13.77	13.62	13.15	12.90	12.66	12.53	12.40	12.27	12.14
6	18.63	14.54	12.92	12.03	11.46	11.07	10.79	10.57	10.39	10.25	9.81	9.59	9.36	9.24	9.12	9.00	8.88
7	16.24	12.40	10.88	10.05	9.52	9.16	8.89	8.68	8.51	8.38	7.97	7.75	7.53	7.42	7.31	7.19	7.08
8	14.69	11.04	9.60	8.81	8.30	7.95	7.69	7.50	7.34	7.21	6.81	6.61	6.40	6.29	6.18	6.06	5.95
9	13.61	10.11	8.72	7.96	7.47	7.13	6.88	6.69	6.54	6.42	6.03	5.83	5.62	5.52	5.41	5.30	5.19
10	12.83	9.43	8.08	7.34	6.87	6.54	6.30	6.12	5.97	5.85	5.47	5.27	5.07	4.97	4.86	4.75	4.64
15	10.80	7.70	6.48	5.80	5.37	5.07	4.85	4.67	4.54	4.42	4.07	3.88	3.69	3.58	3.48	3.37	3.26
20	9.94	6.99	5.82	5.17	4.76	4.47	4.26	4.09	3.96	3.85	3.50	3.32	3.12	3.02	2.92	2.81	2.69
30	9.18	6.35	5.24	4.62	4.23	3.95	3.74	3.58	3.45	3.34	3.01	2.82	2.63	2.52	2.42	2.30	2.18
40	8.83	6.07	4.98	4.37	3.99	3.71	3.51	3.35	3.22	3.12	2.78	2.60	2.40	2.30	2.18	2.06	1.93
60	8.49	5.79	4.73	4.14	3.76	3.49	3.29	3..13	3.01	2.90	2.57	2.39	2.19	2.08	1.96	1.83	1.69
120	8.18	5.54	4.50	3.92	3.55	3.28	3.09	2.93	2.81	2.71	2.37	2.19	1.98	1.87	1.75	1.61	1.43
∞	7.88	5.30	4.28	3.72	3.35	3.09	2.90	2.74	2.62	2.52	2.19	2.00	1.79	1.67	1.53	1.36	1.00

TEST DE

KOLMOGOROV-SMIRNOV

n	α	
	0,05	0,01
1	0.975	0.995
2	0.842	0.929
3	0.708	0.828
4	0.624	0.733
5	0.565	0.669
6	0.521	0.618
7	0.486	0.577
8	0.457	0.543
9	0.432	0.514
10	0.410	0.490
11	0.391	0.468
12	0.375	0.450
13	0.361	0.433
14	0.349	0.418
15	0.338	0.404
16	0.328	0.392
17	0.318	0.381
18	0.309	0.371
19	0.301	0.363
20	0.294	0.356
25	0.27	0.32
30	0.24	0.29
35	0.23	0.27
n>35	$\frac{1.36}{\sqrt{n}}$	$\frac{1.63}{\sqrt{n}}$

VALORES CRÍTICOS PARA EL TEST DE RACHAS

$\alpha/2 = 0'025$

Valor crítico inferior

n_1 \ n_2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2											2	2	2	2	2	2	2	2	2
3					2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
4				2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4
5			2	2	3	3	3	3	3	4	4	4	4	4	4	4	5	5	5
6		2	2	3	3	3	3	4	4	4	4	5	5	5	5	5	5	6	6
7		2	2	3	3	3	4	4	5	5	5	5	5	6	6	6	6	6	6
8		2	3	3	3	4	4	5	5	5	6	6	6	6	6	7	7	7	7
9		2	3	3	4	4	5	5	5	6	6	6	7	7	7	7	8	8	8
10		2	3	3	4	5	5	5	6	6	7	7	7	7	8	8	8	8	9
11		2	3	4	4	5	5	6	6	7	7	7	8	8	8	9	9	9	9
12	2	2	3	4	4	5	6	6	7	7	7	8	8	8	9	9	9	10	10
13	2	2	3	4	5	5	6	6	7	7	8	8	9	9	9	10	10	10	10
14	2	2	3	4	5	5	6	7	7	8	8	9	9	9	10	10	10	11	11
15	2	3	3	4	5	6	6	7	7	8	8	9	9	10	10	11	11	11	12
16	2	3	4	4	5	6	6	7	8	8	9	9	10	10	11	11	11	12	12
17	2	3	4	4	5	6	7	7	8	9	9	10	10	11	11	11	12	12	13
18	2	3	4	5	5	6	7	8	8	9	9	10	10	11	11	12	12	13	13
19	2	3	4	5	6	6	7	8	8	9	10	10	11	11	12	12	13	13	13
20	2	3	4	5	6	6	7	8	9	9	10	10	11	12	12	13	13	13	14

Valor crítico superior

n_1 \ n_2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2																			
3																			
4				9	9														
5			9	10	10	11	11												
6			9	10	11	12	12	13	13	13	13								
7				11	12	13	13	14	14	14	14	15	15	15					
8				11	12	13	14	14	15	15	16	16	16	16	17	17	17	17	17
9					13	14	14	15	16	16	16	17	17	18	18	18	18	18	18
10					13	14	15	16	16	17	17	18	18	18	19	19	19	20	20
11					13	14	15	16	17	17	18	19	19	19	20	20	20	21	21
12					13	14	16	16	17	18	19	19	20	20	21	21	21	22	22
13						15	16	17	18	19	19	20	20	21	21	22	22	23	23
14						15	16	17	18	19	20	20	21	22	22	23	23	23	24
15						15	16	18	18	19	20	21	22	22	23	23	24	24	25
16							17	18	19	20	21	21	22	23	23	24	25	25	25
17							17	18	19	20	21	22	23	23	24	25	25	26	26
18							17	18	19	20	21	22	23	24	25	25	26	26	27
19							17	18	20	21	22	23	23	24	25	26	26	27	27
20							17	18	20	21	22	23	24	25	25	26	27	27	28

$$n_1 > 20 \text{ ó } n_2 > 20 \qquad T = \frac{r - \left(\frac{2n_1n_2}{n_1+n_2} + 1\right)}{\sqrt{\frac{2n_1n_2(2n_1n_2 - n_1 - n_2)}{(n_1+n_2)^2(n_1+n_2-1)}}} \sim N(0,1)$$