UNIVERSIDAD NACIONAL DEL COMAHUE FACULTAD DE ECONOMÍA Y ADMINISTRACIÓN

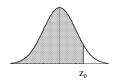


ESTADISTICA

TABLAS

TABLA I (a)
DISTRIBUCION NORMAL ESTANDAR ACUMULADA

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



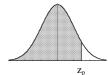
z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0	.5000	.4960	.4920	.4880	.4840	.4801	.4761	.4721	.4681	.4641
1	.4602	.4562	.4522	.4483	.4443	.4404	.4364	.4325	.4286	.4247
2	.4207	.4168	.4129	.4090	.4052	.4013	.3974	.3936	.3897	.3859
3	.3821	.3783	.3745	.3707	.3669	.3632	.3594	.3557	.3520	.3483
4	.3446	.3409	.3372	.3336	.3300	.3264	.3228	.3192	.3156	.3121
5	.3085	.3050	.3015	.2981	.2946	.2912	.2877	.2843	.2810	.2776
6	.2743	.2709	.2676	.2643	.2611	.2578	.2546	.2514	.2483	.2451
7	.2420	.2389	.2358	.2327	.2297	.2266	.2236	.2206	.2177	.2148
8	.2119	.2090	.2061	.2033	.2005	.1977	.1949	.1922	.1894	.1867
9	.1841	.1814	.1788	.1762	.1736	.1711	.1685	.1660	.1635	.1611
- 1.0	.1587	.1562	.1539	.1515	.1492	.1469	.1446	.1423	.1401	.1379
- 1.1	.1357	.1335	.1314	.1292	.1271	.1251	.1230	.1210	.1190	.1170
- 1.2	.1151	.1131	.1112	.1093	.1075	.1056	.1038	.1020	.1003	.09853
- 1.3	.09680	.09510	.09342	.09176	.09012	.08851	.08691	.08534	.08379	.08226
- 1.4	.08076	.07927	.07780	.07636	.07493	.07353	.07215	.07078	.06944	.06811
- 1.5	.06681	.06552	.06426	.06301	.06178	.06057	.05938	.05821	.05705	.05592
- 1.6	.05480	.05370	.05262	.05 155	.05050	.04947	.04846	.04746	.04648	.04551
- 1.7	.04457	.04363	.04272	.04182	.04093	.04006	.03920	.03836	.03754	.03673
- 1.8	.03593	.03515	.03438	.03362	.03288	.03216	.03144	.03074	.03005	.02938
- 1.9	.02872	.02807	.02743	.02680	.02619	.02559	.02500	.02442	.02385	.02330
- 2.0	.02275	.02222	.02169	.02118	.02068	.02018	.01970	.01923	.01876	.01831
- 2.1	.01786	.01743	.01700	.01659	.01618	.01578	.01539	.01500	.01463	.01426
- 2.2	.01390	.01355	.01321	.01287	.01255	.01222	.01191	.01160	.01130	.01101
- 2.3	.01072	.01044	.01017	.0 ² 9903	.0 ² 9642	.0 ² 9387	.0 ² 9137	.0 ² 8894	.0 ² 8656	.0 ² 8424
- 2.4	.0 ² 8198	.0 ² 7976	.0 ² 7760	.0 ² 7549	.0 ² 7344	.0 ² 7143	.0 ² 6947	.0 ² 6756	.0 ² 6569	.0 ² 6387
- 2.5	.0 ² 6210	.0 ² 6037	.0 ² 5868	.0 ² 5703	.0 ² 5543	.0 ² 5386	.0 ² 5234	.0 ² 5085	.0 ² 4940	.0 ² 4799
- 2.6	.0 ² 4661	.0 ² 4527	.0 ² 4396	.0 ² 4269	.0 ² 4145	.0 ² 4025	.0 ² 3907	.0 ² 3793	.0 ² 3681	.0 ² 3573
- 2.7	.0 ² 3467	.0 ² 3364	.0 ² 3264	.0 ² 3167	.0 ² 3072	.0 ² 2980	.0 ² 2890	.0 ² 2803	.0 ² 2718	.0 ² 2035
- 2.8	.0 ² 2555	.0 ² 2477	.0 ² 2401	.0 ² 2327	.0 ² 2256	.0 ² 2186	.0 ² 2118	.0 ² 2052	.0 ² 1988	.0 ² 1926
- 2.9	.0 ² 1866	.0 ² 1807	.0 ² 1750	.0 ² 1695	.0 ² 1641	.0 ² 1589	.0 ² 1538	.0 ² 1489	.0 ² 1441	.0 ² 1395
- 3.0	.0 ² 1350	.0 ² 1306	.0 ² 1264	.0 ² 1223	.0 ² 1183	.0 ² 1144	.0 ² 1107	.0 ² 1070	.0 ² 1035	.0 ² 1001
- 3.1	.0 ³ 9676	.0 ³ 9354	.0 ³ 9043	.0 ³ 8740	.0 ³ 8447	.0 ³ 8164	.0 ³ 7888	.0 ³ 7622	.0 ³ 7364	.0 ³ 7114
- 3.2	.0 ³ 6871	.0 ³ 6637	.0 ³ 6410	.0 ³ 6190	.0 ³ 5976	.0 ³ 5770	.0 ³ 5571	.0 ³ 5377	.0 ³ 5190	.0 ³ 5009
- 3.3	.0 ³ 4834	.0 ³ 4665	.0 ³ 4501	.0 ³ 4342	.0 ³ 4189	.0 ³ 4041	.0 ³ 3897	.0 ³ 3758	.0 ³ 3624	.0 ³ 3495
- 3.4	.0 ³ 3369	.0 ³ 3248	.0 ³ 3131	.0 ³ 3018	.0 ³ 2909	.0 ³ 2803	.0 ³ 2701	.0 ³ 2602	.0 ³ 2507	.0 ³ 2415
- 3.5	.0 ³ 2326	.0 ³ 2241	.0 ³ 2158	.0 ³ 2078	$.0^{3}2001$ $.0^{3}1363$ $.0^{4}9201$ $.0^{4}6152$ $.0^{4}4074$.0 ³ 1926	.0 ³ 1854	.0 ³ 1785	$.0^{3}1718$.0 ³ 1653
- 3.6	.0 ³ 1591	.0 ³ 1531	.0 ³ 1473	.0 ³ 1417		.0 ³ 1311	.0 ³ 1261	.0 ³ 1213	$.0^{3}1166$.0 ³ 1121
- 3.7	.0 ³ 1078	.0 ³ 1036	.0 ⁴ 9961	.0 ⁴ 9574		.0 ⁴ 8842	.0 ⁴ 8496	.0 ⁴ 8162	$.0^{4}7841$.0 ⁴ 7532
- 3.8	.0 ⁴ 7235	.0 ⁴ 6948	.0 ⁴ 6673	.0 ⁴ 6407		.0 ⁴ 5906	.0 ⁴ 5669	.0 ⁴ 5442	$.0^{4}5223$.0 ⁴ 5012
- 3.9	.0 ⁴ 4810	.0 ⁴ 4615	.0 ⁴ 4427	.0 ⁴ 4247		.0 ⁴ 3908	.0 ⁴ 3747	.0 ⁴ 3594	$.0^{4}3446$.0 ⁴ 3304
- 4.0	.0 ⁴ 3167	.0 ⁴ 3036	.0 ⁴ 2910	.0 ⁴ 2789	.0 ⁴ 2673	.0 ⁴ 2561	.0 ⁴ 2454	.0 ⁴ 2351	.0 ⁴ 2252	.0 ⁴ 2157
- 4.1	.0 ⁴ 2066	.0 ⁴ 1978	.0 ⁴ 1894	.0 ⁴ 1814	.0 ⁴ 1737	.041662	.0 ⁴ 1591	.0 ⁴ 1523	.0 ⁴ 1458	.0 ⁴ 1395
- 4.2	.0 ⁴ 1335	.0 ⁴ 1277	.0 ⁴ 1222	.0 ⁴ 1168	.0 ⁴ 1118	.0 ⁴ 1069	.0 ⁴ 1022	.0 ⁵ 9774	.0 ⁵ 9345	.0 ⁵ 8934
- 4.3	.0 ⁵ 8540	.0 ⁵ 8163	.0 ⁵ 7801	.0 ⁵ 7455	.0 ⁵ 7124	.0 ⁵ 6807	.0 ⁵ 6503	.0 ⁵ 6212	.0 ⁵ 5934	.0 ⁵ 5668
- 4.4	.0 ⁵ 5413	.0 ⁵ 5169	.0 ⁵ 4935	.0 ⁵ 4712	.0 ⁵ 4498	.0 ⁵ 4294	.0 ⁵ 4098	.0 ⁵ 3911	.0 ⁵ 3732	.0 ⁵ 3561
- 4.5	$.0^{5}3398$ $.0^{5}2112$ $.0^{5}1301$ $.0^{6}7933$ $.0^{6}4792$	$.0^{5}3241$.0 ⁵ 3092	.0 ⁵ 2949	$.0^{5}2813$.0 ⁵ 2682	.0 ⁵ 2558	.0 ⁵ 2439	.0 ⁵ 2325	.0 ⁵ 2216
- 4.6		$.0^{5}2013$.0 ⁵ 1919	.0 ⁵ 1828	$.0^{5}1742$.0 ⁵ 1660	.0 ⁵ 1581	.0 ⁵ 1506	.0 ⁵ 1434	.0 ⁵ 1366
- 4.7		$.0^{5}1239$.0 ⁵ 1179	.0 ⁵ 1123	$.0^{5}1069$.0 ⁵ 1017	.0 ⁶ 9680	.0 ⁶ 9211	.0 ⁶ 8765	.0 ⁶ 7228
- 4.8		$.0^{6}7547$.0 ⁶ 7178	.0 ⁶ 6827	$.0^{6}6492$.0 ⁶ 6173	.0 ⁶ 5869	.0 ⁶ 5580	.0 ⁶ 5304	.0 ⁶ 5042
- 4.9		$.0^{6}4554$.0 ⁶ 4327	.0 ⁶ 4111	$.0^{6}3906$.0 ⁶ 3711	.0 ⁶ 3525	.0 ⁶ 3348	.0 ⁶ 3179	.0 ⁶ 3019

Ejemplo: $P(Z < -3.57) = \phi(-3.57) = .0^3 1785 = 0.0001785$

Fuente: Hald, A., 1952, Statistical Tables and Formulas

TABLA I (b)
DISTRIBUCION NORMAL ESTANDAR ACUMULADA

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



							$Z_{\mathfrak{p}}$			
Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
.0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319	.5359
.1	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714	.5753
.2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103	.6141
.3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480	.6517
.4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844	.6879
_	CO45	0050	CO0F	7040	7054	7000	7400	74.57	7400	7004
.5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190	.7224
.6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517	.7549
.7	.7580	.7611	.7642	.7673	.7703	.7734	.7764	.7794	.7823	.7852
.8	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106	.8133
.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365	.8389
1.0	.8413	.8438	.8461	.8485	.8508	.8531	.8554	.8577	.8599	.8621
1.1	.8643	.8665	.8686	.8708	.8729	.8749	.8770	.8790	.8810	.8830
1.2	.8849	.8869	.8888	.8907	.8925	.8944	.8962	.8980	.8997	.90147
1.3	.90320	.90490	.90658	.90824	.90988	.91149	.91309	.91466	.91621	.91774
1.4	.91924	.92073	.92220	.92364	.92507	.92647	.92785	.92922	.93056	.93189
1.5	.93319	.93448	.93574	.93699	.93822	.93943	.94062	.94179	.94295	.94408
1.6	.94520	.94630	.94738	.94845	.94950	.95053	.95154	.95254	.95352	.95449
1.7	.95543	.95637	.95728	.95818	.95907	.95994	.96080	.96164	.96246	.96327
1.8	.96407	.96485	.96562	.96638	.96712	.96784	.96856	.96926	.96995	.97062
1.9	.97128	.97193	.97257	.97320	.97381	.97441	.97500	.97558	.97615	.97670
1.5	.57 120	.07 100	.57257	.57520	.57501	.57 441	.57500	.57 556	.57015	.57070
2.0	.97725	.97778	.97831	.97882	.97932	.97982	.98030	.98077	.98124	.98169
2.1	.98214	.98257	.98300	.98341	.98382	.98422	.98461	.98500	.98537	.98574
2.2	.98610	.98645	.98679	.98713	.98745	.98778	.98809	.98840	.98870	.98899
2.3	.98928	.98956	.98983	.9 ² 0097	$.9^{2}0358$.9 ² 0613	$.9^{2}0863$.9 ² 1106	.9 ² 1344	.9 ² 1 576
2.4	.9 ² 1802	.9 ² 2024	.9 ² 2240	.9 ² 2451	.9 ² 2656	.9 ² 2857	$.9^{2}3053$.9 ² 3244	.9 ² 3431	.9 ² 3613
2.5	.9 ² 3790	.9 ² 3963	.9 ² 4132	.9 ² 4297	.9 ² 4457	.9 ² 4614	.9 ² 4766	.9 ² 4915	.9 ² 5060	.9 ² 5201
2.6	.9 ² 5339	$.9^25473$.9 ² 5604	.9 ² 5731	$.9^25855$	$.9^{2}5975$	$.9^{2}6093$.9 ² 6207	$.9^{2}6319$.9 ² 6427
2.7	.9 ² 6533	$.9^{2}6636$.9 ² 6736	$.9^{2}6833$	$.9^{2}6928$	$.9^27020$	$.9^27110$	$.9^27197$	$.9^{2}7282$.9 ² 7365
2.8	.9 ² 7445	$.9^{2}7523$	$.9^{2}7599$	$.9^{2}7673$	$.9^{2}7744$	$.9^{2}7814$	$.9^{2}7882$	$.9^{2}7948$	$.9^{2}8012$	$.9^{2}8074$
2.0	.9 ² 8134	.9 ² 8193	.9 ² 8250	.9 ² 8305	$.9^{2} 8359$.9 ² 8411	.9 ² 8462	.9 ² 8511	.9 ² 8559	.9 ² 8605
2.5	.5 0154									
3.0	.9 ² 8650	$.9^{2}8694$	$.9^{2}8736$	$.9^{2}8777$	$.9^{2}8817$	$.9^{2}8856$	$.9^{2}8893$	$.9^{2}8930$	$.9^{2}8965$	$.9^{2}8999$
3.1	.9 ³ 0324	.9 ³ 0646	.9 ³ 0957	.9 ³ 1260	.9 ³ 1553	$.9^{3}1836$.9 ³ 2112	$.9^{3}2378$.9 ³ 2636	.9 ³ 2886
3.2	.9 ³ 3129	.9 ³ 3363	$.9^{3}3590$.9 ³ 3810	$.9^{3}4024$.9 ³ 4230	$.9^{3}4429$	$.9^{3}4623$.9 ³ 4810	.9 ³ 4991
3.3	.9 ³ 5166	.9 ³ 5335	.9 ³ 5499	.9 ³ 5658	.9 ³ 5811	.9 ³ 5959	.9 ³ 6103	$.9^{3}6242$.9 ³ 6376	$.9^{3}6505$
3.4	.9 ³ 6631	.9 ³ 6752	$.9^{3}6869$	$.9^{3}6982$.9 ³ 7091	.9 ³ 7197	$.9^37299$.9 ³ 7398	.9 ³ 7493	$.9^37585$
3.5	.9 ³ 7674	.9 ³ 7759	.9 ³ 7842	.9 ³ 7922	.9 ³ 7999	.9 ³ 8074	.9 ³ 8146	.9 ³ 8215	.9 ³ 8282	.9 ³ 8347
	.9 ³ 8409	.9 ³ 8469	.9 ³ 8527	.9 ³ 8583	.9 ³ 8637	.9 ³ 8689	.9 ³ 8739	.9 ³ 8787	.9 8282	.9 8347 .9 ³ 8879
3.6 3.7	.9 8409 .9 ³ 8922	.9 6469 .9 ³ 8964	.9 6527 .9 ⁴ 0039	.9 6363 .9 ⁴ 0426	.9 6637 .9 ⁴ 0799	.9 6069 .9 ⁴ 1158	.9 6739 .9 ⁴ 1504	.9 67 67 .9 ⁴ 1838	.9 6634 .9 ⁴ 2159	.9 6679 .9 ⁴ 2468
		.9 6964 .9 3052	.9 0039 .9 ⁴ 3327	.9 0426 .9 3593	.9 0799 .9 ⁴ 3848	.9 ⁴ 4094	.9 ⁴ 4331	.9 1036 .9 ⁴ 4558		.9 2466 .9 4988
3.8 3.9	.9 ⁴ 2765 .9 ⁴ 5190	.9 3052 .9 ⁴ 5385	.9 3327 .9 ⁴ 5573	.9 3593 .9 ⁴ 5753	.9 3646 .9 ⁴ 5926	.9 4094 .9 ⁴ 6092	.9 4331 .9 ⁴ 6253	.9 4556 .9 ⁴ 6406	.9 ⁴ 4777 .9 ⁴ 6554	.9 4988 .9 ⁴ 6696
3.9	.9 3190	.9 5565	.9 557 5	.9 3/33	.9 3920	.9 0092	.9 0203	.9 0400	.9 0004	.9 0090
4.0	.9 ⁴ 6833	.9 ⁴ 6964	.9 ⁴ 7090	.9 ⁴ 7211	.9 ⁴ 7327	.9 ⁴ 7439	.9 ⁴ 7546	.9 ⁴ 7649	.9 ⁴ 7748	.9 ⁴ 7843
4.1	.9⁴7934	$.9^{4}8022$.9⁴8106	.9⁴8186	.9 ⁴ 8263	.9 ⁴ 8338	.9 ⁴ 8409	.9 ⁴ 8477	.9 ⁴ 8542	.9 ⁴ 8605
4.2	.9⁴8665	.9 ⁴ 8723	.9 ⁴ 8778	.9 ⁴ 8832	$.9^48882$.9⁴8931	.9 ⁴ 8978	.9⁵0226	.9⁵0655	.9 ⁵ 1066
4.3	.9⁵1460	.9⁵1837	.9⁵2199	.9⁵2545	.9⁵2876	.9⁵3193	.9 ⁵ 3497	.9⁵3788	.9⁵4066	.9⁵4332
4.4	.9⁵4587	.9⁵4831	.9 ⁵ 5065	.9 ⁵ 5288	.9 ⁵ 5502	.9⁵5706	.9 ⁵ 5902	.9 ⁵ 6089	.9⁵6268	.9 ⁵ 6439
	050005			05-0-1	05			o5===:		
4.5	.9 ⁵ 6602	.9 ⁵ 6759	.9 ⁵ 6908	.9 ⁵ 7051	.9 ⁵ 7187	.9 ⁵ 7318	.9 ⁵ 7442	.9 ⁵ 7561	.9 ⁵ 7675	.9 ⁵ 7784
4.6	.9 ⁵ 7888	.9 ⁵ 7987	.9 ⁵ 8081	.9 ⁵ 8172	.9 ⁵ 8258	.9 ⁵ 8340	.9 ⁵ 8419	.9 ⁵ 8494	.9 ⁵ 8566	.9 ⁵ 8634
4.7	.9 ⁵ 8699	.9 ⁵ 8761	.9 ⁵ 8821	.9 ⁵ 8877	.9 ⁵ 8931	.9 ⁵ 8983	.9 ⁶ 0320	.9 ⁶ 0789	.9 ⁶ 1235	.9 ⁶ 1661
4.8	.9 ⁶ 2067	.9 ⁶ 2453	.9 ⁶ 2822	.9 ⁶ 3173	.9 ⁶ 3508	.9 ⁶ 3827	.9 ⁶ 4131	.9 ⁶ 4420	.9 ⁶ 4696	.9 ⁶ 4958
4.9	.9 ⁶ 5208	.9 ⁶ 5446	.9 ⁶ 5673	.9 ⁶ 5889	.9 ⁶ 6094	.9 ⁶ 6289	.9 ⁶ 6475	.9 ⁶ 6652	.9 ⁶ 6821	.9 ⁶ 6981

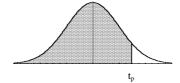
Ejemplo: $P(Z < 3.57) = \phi(3.57) = .9^3 8215 = 0.9998215$

Fuente: Hald, A., 1952, Statistical Tables and Formulas

TABLA II

DISTRIBUCIÓN t DE STUDENT

Valores percentiles (t_p) para la distribución t de Student con ν grados de libertad



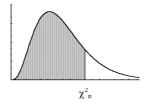
ν	t .995	t .99	t .975	t .95	t .90	t _{.80}	t .75	t _{.70}	t .60	t . 55
1 2 3 4	63.66 9.92 5.84 4.60	31.32 6.96 4.54 3.75	12.71 4.30 3.18 2.78	6.31 2.92 2.35 2.13	3.08 1.89 1.64 1.53	1.376 1.061 .978 .941	1.000 .816 .755 .741	.727 .617 .584 .569	.325 .289 .277 .271	.158 .142 .137 .134
5 6 7 8 9	4.03 3.71 3.50 3.36 3.25	3.36 3.14 3.00 2.90 2.82	2.57 2.45 2.36 2.31 2.26	2.02 1.94 1.90 1.86 1.83	1.48 1.44 1.42 1.40 1.38	.920 .906 .896 .889 .883	.727 .718 .711 .706 .703	.559 .553 .549 .546 .543	.267 .265 .263 .262 .261	.132 .131 .130 .130 .129
10 11 12 13 14	3.17 3.11 3.06 3.01 2.98	2.76 2.72 2.68 2.65 2.62	2.23 2.20 2.18 2.16 2.14	1.81 1.80 1.78 1.77 1.76	1.37 1.36 1.26 1.35 1.34	.879 .876 .873 .870 .868	.700 .697 .695 .694	.542 .540 .539 .533 .537	.260 .260 .259 .259 .258	.129 .129 .128 .128 .128
15 16 17 18 19	2.95 2.92 2.90 2.88 2.86	2.60 2.58 2.57 2.55 2.54	2.13 2.12 2.11 2.10 2.09	1.75 1.75 1.74 1.73 1.73	1.34 1.34 1.33 1.33	.866 .865 .863 .862 .861	.691 .690 .689 .688	.536 .535 .534 .534 .533	.258 .258 .257 .257 .257	.128 .128 .128 .127 .127
20 21 22 23 24	2.84 2.83 2.82 2.81 2.80	2.53 2.52 2.51 2.50 2.49	2.09 2.08 2.07 2.07 2.06	1.72 1.72 1.72 1.71 1.71	1.32 1.32 1.32 1.32 1.32	.860 .859 .858 .858	.687 .686 .686 .685	.533 .532 .532 .532 .531	.257 .257 .256 .256 .256	.127 .127 .127 .127 .127
25 26 27 28 29	2.79 2.78 2.77 2.76 2.76	2.48 2.48 2.47 2.47 2.46	2.06 2.06 2.05 2.05 2.04	1.71 1.71 1.70 1.70 1.70	1.32 1.32 1.31 1.31 1.31	.856 .856 .855 .855	.684 .684 .683 .683	.531 .531 .531 .530 .530	.256 .256 .256 .256 .256	.127 .127 .127 .127 .127
30 40 60 120 ∞	2.75 2.70 2.66 2.62 2.58	2.46 2.42 2.39 2.36 2.33	2.04 2.02 2.00 1.98 1.96	1.70 1.63 1.67 1.66 1.64	1.31 1.30 1.30 1.29 1.28	.854 .851 .848 .845 .842	.683 .681 .679 .677	.530 .529 .527 .526 .524	.256 .255 .254 .254 .253	.127 .126 .126 .126 .126

Fuente: Spiegel Murray R., 1991, Estadística (2º ed.), Schaum, adaptada a partir de R. A. Fisher y F. Yates. Statistical Tables for Biologica1, Agricultural and Medical Research (5ta edición), Tabla III, Oliver y Boyd Ltd, Edinburgh, con autorización de los autores y editores.

TABLA III

DISTRIBUCION CHI-CUADRADO

Valores percentiles $(\chi^2_{\,p})$ para la distribución Chi-cuadrado con ν grados de libertad



ν	χ ² .995	χ².99	χ ² .975	χ^{2} .95	χ ² .90	χ ² .75	χ ² .50	χ ² .25	χ ² .10	χ ² .05)	, ² .025)	ζ ² .01)	, ² .005
1 2 3 4	7.88 10.6 12.8 14.9	6.63 9.21 11.3 13.3	5.02 7.38 9.35 11.1	3.84 5.99 7.81 9.49	2.71 4.61 6.25 7.78	1.32 2.77 4.11 5.39	.455 1.39 2.37 3.36	.102 .575 1.21 1.92	.0158 .211 .584 1.06	.0039 .103 .352 .711			.0000 .0100 .072 .207
5	16.7	15.1	12.8	11.1	9.24	6.63	4.35	2.67	1.61	1.15	.831	.554	.412
6	18.5	16.8	14.4	12.6	10.6	7.84	5.35	3.45	2.20	1.64	1.24	.872	.676
7	20.3	18.5	16.0	14.1	12.0	9.04	6.35	4.25	2.83	2.17	1.69	1.24	.989
8	22.0	20.1	17.5	15.5	13.4	10.2	7.34	5.07	3.49	2.73	2.18	1.65	1.34
9	23.6	21.7	19.0	16.9	14.7	11.4	8.34	5.90	4.17	3.33	2.70	2.09	1.73
10	25.2	23.2	20.5	18.3	16.0	12.5	9.34	6.74	4.87	3.94	3.25	2.56	2.16
11	26.8	24.7	21.9	19.7	17.3	13.7	10.3	7.58	5.58	4.57	3.82	3.05	2.60
12	28.3	26.2	23.3	21.0	18.5	14.8	11.3	8.44	6.30	5.23	4.40	3.57	3.07
13	29.8	27.7	24.7	22.4	19.8	16.0	12.3	9.30	7.04	5.89	5.01	4.11	3.57
14	31.3	29.1	26.1	23.7	21.1	17.1	13.3	10.2	7.79	6.57	5.63	4.66	4.07
15	32.8	30.6	27.5	25.0	22.3	18.2	14.3	11.0	8.55	7.26	6.26	5.23	4.60
16	34.3	32.0	28.8	26.3	23.5	19.4	15.3	11.9	9.31	7.96	6.91	5.81	5.14
17	35.7	33.4	30.2	27.6	24.8	20.5	16.3	12.8	10.1	8.67	7.56	6.41	5.70
18	37.2	34.8	31.5	28.9	26.0	21.6	17.3	13.7	10.9	9.39	8.23	7.01	6.26
19	38.6	36.2	32.9	30.1	27.2	22.7	18.3	14.6	11.7	10.1	8.91	7.63	6.84
20	40.0	37.6	34.2	31.4	28.4	23.8	19.3	15.5	12.4	10.9	9.59	8.26	7.43
21	41.4	38.9	35.5	32.7	29.6	24.9	20.3	16.3	13.2	11.6	10.3	8.90	8.03
22	42.8	40.3	36.8	33.9	30.8	26.0	21.3	17.2	14.0	12.3	11.0	9.54	8.64
23	44.2	41.6	38.1	35.2	32.0	27.1	22.3	18.1	14.3	13.1	11.7	10.2	9.26
24	45.6	43.0	39.4	36.4	33.2	28.2	23.3	19.0	15.7	13.8	12.4	10.9	9.89
25	46.9	44.3	40.6	37.7	34.4	29.3	24.3	19.9	16.5	14.6	13.1	11.5	10.5
26	48.3	45.6	41.9	38.9	35.6	30.4	25.3	20.8	17.3	15.4	13.8	12.2	11.2
27	49.6	47.0	43.2	40.1	36.7	31.5	26.3	21.7	18.1	16.2	14.6	12.9	11.8
28	51.0	48.3	44.5	41.3	37.9	32.6	27.3	22.7	18.9	16.9	15.3	13.6	12.5
29	52.3	49.6	45.7	42.6	39.1	33.7	28.3	23.6	19.8	17.7	16.0	14.3	13.1
30	53.7	50.9	47.0	43.8	40.3	34.8	29.3	24.5	20.6	18.5	16.8	15.0	13.8
40	66.8	63.7	59.3	55.8	51.8	45.6	29.3	33.7	29.1	26.5	24.4	22.2	20.7
50	79.5	76.2	71.4	67.5	63.2	56.3	49.3	42.9	37.7	34.8	32.4	29.7	28.0
60	92.0	88.4	83.3	79.1	74.4	67.0	59.3	52.3	46.5	43.2	40.5	37.5	35.5
70	104.2	100.4	95.0	90.5	85.5	77.6	69.3	61.7	55.3	51.7	48.8	45.4	43.3
80	116.3	112.3	106.6	101.9	96.6	88.1	79.3	71.1	64.3	60.4	57.2	53.5	51.2
90	128.3	124.1	118.1	113.1	107.6	98.6	89.3	80.6	73.3	69.1	65.6	61.8	59.2
100	140.2	135.8	129.6	124.3	118.5	109.1	99.3	90.1	82.4	77.9	74.2	70.1	67.3

Fuente: Spiegel Murray R., 1991, Estadística (2° ed.), Schaum, adaptada a partir de Catherine M. Thompson. Table of percentage points of the χ^2 distribution. Biometrika. Vol. 32 (1941), con autorización del autor y del editor.