TABLAS ESTADÍSTICAS

MRLG.2011

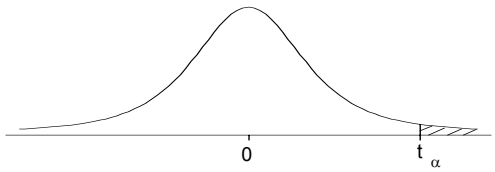
Areas Under the Normal Curve

Z	Cum p	Tail p	Z	Cum p	Tail p	Z	Cum p	Tail p	Z	Cum p	Tail p	Z	Cum p	Tail p
0.00	0.5000	0.5000	0.40	0.6554	0.3446	0.80	0.7881	0.2119	1.20	0.8849	0.1151	1.60	0.9452	0.0548
0.01	0.5040	0.4960	0.41	0.6591	0.3409	0.81	0.7910	0.2090	1.21	0.8869	0.1131	1.61	0.9463	0.0537
0.02	0.5080	0.4920	0.42	0.6628	0.3372	0.82	0.7939	0.2061	1.22	0.8888	0.1112	1.62	0.9474	0.0526
0.03	0.5120	0.4880	0.43	0.6664	0.3336	0.83	0.7967	0.2033	1.23	0.8907	0.1093	1.63	0.9484	0.0516
0.04	0.5160	0.4840	0.44	0.6700	0.3300	0.84	0.7995	0.2005	1.24	0.8925	0.1075	**1.64**	**0.9495**	**0.0505**
0.05	0.5199	0.4801	0.45	0.6736	0.3264	0.85	0.8023	0.1977	1.25	0.8944	0.1056	1.65	0.9505	0.0495
0.06	0.5239	0.4761	0.46	0.6772	0.3228	0.86	0.8051	0.1949	1.26	0.8962	0.1038	1.66	0.9515	0.0485
0.07	0.5279	0.4721	0.47	0.6808	0.3192	0.87	0.8078	0.1922	1.27	0.8980	0.1020	1.67	0.9525	0.0475
0.08	0.5319	0.4681	0.48	0.6844	0.3156	0.88	0.8106	0.1894	1.28	0.8997	0.1003	1.68	0.9535	0.0465
0.09	0.5359	0.4641	0.49	0.6879	0.3121	0.89	0.8133	0.1867	1.29	0.9015	0.0985	1.69	0.9545	0.0455
0.10	0.5398	0.4602	0.50	0.6915	0.3085	0.90	0.8159	0.1841	1.30	0.9032	0.0968	1.70	0.9554	0.0446
0.11	0.5438	0.4562	0.51	0.6950	0.3050	0.91	0.8186	0.1814	1.31	0.9049	0.0951	1.71	0.9564	0.0436
0.12	0.5478	0.4522	0.52	0.6985	0.3015	0.92	0.8212	0.1788	1.32	0.9066	0.0934	1.72	0.9573	0.0427
0.13	0.5517	0.4483	0.53	0.7019	0.2981	0.93	0.8238	0.1762	1.33	0.9082	0.0918	1.73	0.9582	0.0418
0.14	0.5557	0.4443	0.54	0.7054	0.2946	0.94	0.8264	0.1736	1.34	0.9099	0.0901	1.74	0.9591	0.0409
0.15	0.5596	0.4404	0.55	0.7088	0.2912	0.95	0.8289	0.1711	1.35	0.9115	0.0885	1.75	0.9599	0.0401
0.16	0.5636	0.4364	0.56	0.7123	0.2877	0.96	0.8315	0.1685	1.36	0.9131	0.0869	1.76	0.9608	0.0392
0.17	0.5675	0.4325	0.57	0.7157	0.2843	0.97	0.8340	0.1660	1.37	0.9147	0.0853	1.77	0.9616	0.0384
0.18	0.5714	0.4286	0.58	0.7190	0.2810	0.98	0.8365	0.1635	1.38	0.9162	0.0838	1.78	0.9625	0.0375
0.19	0.5753	0.4247	0.59	0.7224	0.2776	0.99	0.8389	0.1611	1.39	0.9177	0.0823	1.79	0.9633	0.0367
0.20	0.5793	0.4207	0.60	0.7257	0.2743	1.00	0.8413	0.1587	1.40	0.9192	0.0808	1.80	0.9641	0.0359
0.21	0.5832	0.4168	0.61	0.7291	0.2709	1.01	0.8438	0.1562	1.41	0.9207	0.0793	1.81	0.9649	0.0351
0.22	0.5871	0.4129	0.62	0.7324	0.2676	1.02	0.8461	0.1539	1.42	0.9222	0.0778	1.82	0.9656	0.0344
0.23	0.5910	0.4090	0.63	0.7357	0.2643	1.03	0.8485	0.1515	1.43	0.9236	0.0764	1.83	0.9664	0.0336
0.24	0.5948	0.4052	0.64	0.7389	0.2611	1.04	0.8508	0.1492	1.44	0.9251	0.0749	1.84	0.9671	0.0329
0.25	0.5987	0.4013	0.65	0.7422	0.2578	1.05	0.8531	0.1469	1.45	0.9265	0.0735	1.85	0.9678	0.0322
0.26	0.6026	0.3974	0.66	0.7454	0.2546	1.06	0.8554	0.1446	1.46	0.9279	0.0721	1.86	0.9686	0.0314
0.27	0.6064	0.3936	0.67	0.7486	0.2514	1.07	0.8577	0.1423	1.47	0.9292	0.0708	1.87	0.9693	0.0307
0.28	0.6103	0.3897	0.68	0.7517	0.2483	1.08	0.8599	0.1401	1.48	0.9306	0.0694	1.88	0.9699	0.0301
0.29	0.6141	0.3859	0.69	0.7549	0.2451	1.09	0.8621	0.1379	1.49	0.9319	0.0681	1.89	0.9706	0.0294
0.30	0.6179	0.3821	0.70	0.7580	0.2420	1.10	0.8643	0.1357	1.50	0.9332	0.0668	1.90	0.9713	0.0287
0.31	0.6217	0.3783	0.71	0.7611	0.2389	1.11	0.8665	0.1335	1.51	0.9345	0.0655	1.91	0.9719	0.0281
0.32	0.6255	0.3745	0.72	0.7642	0.2358	1.12	0.8686	0.1314	1.52	0.9357	0.0643	1.92	0.9726	0.0274
0.33	0.6293	0.3707	0.73	0.7673	0.2327	1.13	0.8708	0.1292	1.53	0.9370	0.0630	1.93	0.9732	0.0268
0.34	0.6331	0.3669	0.74	0.7704	0.2296	1.14	0.8729	0.1271	1.54	0.9382	0.0618	1.94	0.9738	0.0262
0.35	0.6368	0.3632	0.75	0.7734	0.2266	1.15	0.8749	0.1251	1.55	0.9394	0.0606	1.95	0.9744	0.0256
0.36	0.6406	0.3594	0.76	0.7764	0.2236	1.16	0.8770	0.1230	1.56	0.9406	0.0594	**1.96**	**0.9750**	**0.0250**
0.37	0.6443	0.3557	0.77	0.7794	0.2206	1.17	0.8790	0.1210	1.57	0.9418	0.0582	1.97	0.9756	0.0244
0.38	0.6480	0.3520	0.78	0.7823	0.2177	1.18	0.8810	0.1190	1.58	0.9429	0.0571	1.98	0.9761	0.0239
0.39	0.6517	0.3483	0.79	0.7852	0.2148	1.19	0.8830	0.1170	1.59	0.9441	0.0559	1.99	0.9767	0.0233

Areas Under the Normal Curve (continuation)

Z	Cum p	Tail p
2.00	0.9772	0.0228
2.01	0.9778	0.0222
2.02	0.9783	0.0217
2.03	0.9788	0.0212
2.04	0.9793	0.0207
2.05	0.9798	0.0202
2.06	0.9803	0.0197
2.07	0.9808	0.0192
2.08	0.9812	0.0188
2.09	0.9817	0.0183
2.10	0.9821	0.0179
2.11	0.9826	0.0174
2.12	0.9830	0.0170
2.13	0.9834	0.0166
2.14	0.9838	0.0162
2.15	0.9842	0.0158
2.16	0.9846	0.0154
2.17	0.9850	0.0150
2.18	0.9854	0.0146
2.19	0.9857	0.0143
2.20	0.9861	0.0139
2.21	0.9864	0.0136
2.22	0.9868	0.0132
2.23	**0.9871**	**0.0129**
2.24	0.9875	0.0125
2.25	0.9878	0.0122
2.26	0.9881	0.0119
2.27	0.9884	0.0116
2.28	0.9887	0.0113
2.29	0.9890	0.0110
2.30	0.9893	0.0107
2.31	0.9896	0.0104
2.32	0.9898	0.0102
2.33	0.9901	0.0099
2.34	0.9904	0.0096
2.35	0.9906	0.0094
2.36	0.9909	0.0091
2.37	0.9911	0.0089
2.38	0.9913	0.0087
2.39	0.9916	0.0084
2.40	0.9918	0.0082
2.41	0.9920	0.0080
2.42	0.9922	0.0078
2.43	0.9925	0.0075
2.44	0.9927	0.0073
2.45	0.9929	0.0071
2.46	0.9931	0.0069
2.47	0.9932	0.0068
2.48	0.9934	0.0066
2.49	0.9936	0.0064
2.50	0.9938	0.0062
2.51	0.9940	0.0060
2.52	0.9941	0.0059
2.53	0.9943	0.0057
2.54	0.9945	0.0055
2.55	0.9946	0.0054
2.56	0.9948	0.0052
2.57	**0.9949**	**0.0051**
2.58	0.9951	0.0049
2.59	0.9952	0.0048
2.60	0.9953	0.0047
2.61	0.9955	0.0045
2.62	0.9956	0.0044
2.63	0.9957	0.0043
2.64	0.9959	0.0041
2.65	0.9960	0.0040
2.66	0.9961	0.0039
2.67	0.9962	0.0038
2.68	0.9963	0.0037
2.69	0.9964	0.0036
2.70	0.9965	0.0035
2.71	0.9966	0.0034
2.72	0.9967	0.0033
2.73	0.9968	0.0032
2.74	0.9969	0.0031
2.75	0.9970	0.0030
2.76	0.9971	0.0029
2.77	0.9972	0.0028
2.78	0.9973	0.0027
2.79	0.9974	0.0026
2.80	0.9974	0.0026
2.81	0.9975	0.0025
2.82	0.9976	0.0024
2.83	0.9977	0.0023
2.84	0.9977	0.0023
2.85	0.9978	0.0022
2.86	0.9979	0.0021
2.87	0.9979	0.0021
2.88	0.9980	0.0020
2.89	0.9981	0.0019
2.90	0.9981	0.0019
2.91	0.9982	0.0018
2.92	0.9982	0.0018
2.93	0.9983	0.0017
2.94	0.9984	0.0016
2.95	0.9984	0.0016
2.96	0.9985	0.0015
2.97	0.9985	0.0015
2.98	0.9986	0.0014
2.99	0.9986	0.0014
3.00	0.9987	0.0013
3.01	0.9987	0.0013
3.02	0.9987	0.0013
3.03	0.9988	0.0012
3.04	0.9988	0.0012
3.05	0.9989	0.0011
3.06	0.9989	0.0011
3.07	0.9989	0.0011
3.08	0.9990	0.0010
3.09	0.9990	0.0010
3.10	0.9990	0.0010
3.11	0.9991	0.0009
3.12	0.9991	0.0009
3.13	0.9991	0.0009
3.14	0.9992	0.0008
3.15	0.9992	0.0008
3.16	0.9992	0.0008
3.17	0.9992	0.0008
3.18	0.9993	0.0007
3.19	0.9993	0.0007
3.20	0.9993	0.0007
3.21	0.9993	0.0007
3.22	0.9994	0.0006
3.23	0.9994	0.0006
3.24	0.9994	0.0006
3.25	0.9994	0.0006
3.26	0.9994	0.0006
3.27	0.9995	0.0005
3.28	0.9995	0.0005
3.29	0.9995	0.0005
3.30	0.9995	0.0005
3.31	0.9995	0.0005
3.32	0.9995	0.0005
3.33	0.9996	0.0004
3.34	0.9996	0.0004
3.35	0.9996	0.0004
3.36	0.9996	0.0004
3.37	0.9996	0.0004
3.38	0.9996	0.0004
3.39	0.9997	0.0003
3.40	0.9997	0.0003
3.41	0.9997	0.0003
3.42	0.9997	0.0003
3.43	0.9997	0.0003
3.44	0.9997	0.0003
3.45	0.9997	0.0003
3.46	0.9997	0.0003
3.47	0.9997	0.0003
3.48	0.9997	0.0003
3.49	0.9998	0.0002
3.50	0.9998	0.0002
3.60	0.9998	0.0002
3.70	0.9999	0.0001
3.80	0.9999	0.0001
3.90	1.0000	0.0000

Upper Critical Values of Student's T-distribution

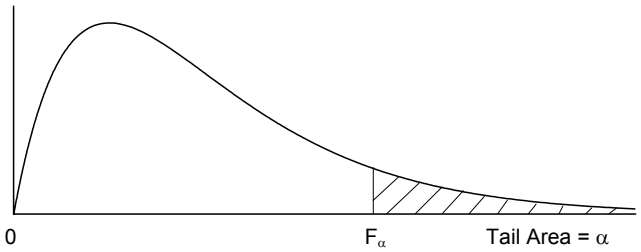


df	Tail Area α .10	.05	.025	.01	.005
1	3.0777	6.3138	12.706	31.821	63.657
2	1.8856	2.9200	4.3027	6.9646	9.9248
3	1.6377	2.3534	3.1824	4.5407	5.8409
4	1.5332	2.1318	2.7764	3.7469	4.6041
5	1.4759	2.0150	2.5706	3.3649	4.0321
6	1.4398	1.9432	2.4469	3.1427	3.7074
7	1.4149	1.8946	2.3646	2.9980	3.4995
8	1.3968	1.8595	2.3060	2.8965	3.3554
9	1.3830	1.8331	2.2622	2.8214	3.2498
10	1.3722	1.8125	2.2281	2.7638	3.1693
11	1.3634	1.7959	2.2010	2.7181	3.1058
12	1.3562	1.7823	2.1788	2.6810	3.0545
13	1.3502	1.7709	2.1604	2.6503	3.0123
14	1.3450	1.7613	2.1448	2.6245	2.9768
15	1.3406	1.7531	2.1314	2.6025	2.9467
16	1.3368	1.7459	2.1199	2.5835	2.9208
17	1.3334	1.7396	2.1098	2.5669	2.8982
18	1.3304	1.7341	2.1009	2.5524	2.8784
19	1.3277	1.7291	2.0930	2.5395	2.8609
20	1.3253	1.7247	2.0860	2.5280	2.8453
21	1.3232	1.7207	2.0796	2.5176	2.8314
22	1.3212	1.7171	2.0739	2.5083	2.8188
23	1.3195	1.7139	2.0687	2.4999	2.8073
24	1.3178	1.7109	2.0639	2.4922	2.7969
25	1.3163	1.7081	2.0595	2.4851	2.7874
26	1.3150	1.7056	2.0555	2.4786	2.7787
27	1.3137	1.7033	2.0518	2.4727	2.7707
28	1.3125	1.7011	2.0484	2.4671	2.7633
29	1.3114	1.6991	2.0452	2.4620	2.7564
30	1.3104	1.6973	2.0423	2.4573	2.7500
31	1.3095	1.6955	2.0395	2.4528	2.7440
32	1.3086	1.6939	2.0369	2.4487	2.7385
33	1.3077	1.6924	2.0345	2.4448	2.7333
34	1.3070	1.6909	2.0322	2.4411	2.7284
35	1.3062	1.6896	2.0301	2.4377	2.7238
36	1.3055	1.6883	2.0281	2.4345	2.7195
37	1.3049	1.6871	2.0262	2.4314	2.7154
38	1.3042	1.6860	2.0244	2.4286	2.7116
39	1.3036	1.6849	2.0227	2.4258	2.7079
40	1.3031	1.6839	2.0211	2.4233	2.7045
41	1.3025	1.6829	2.0195	2.4208	2.7012
42	1.3020	1.6820	2.0181	2.4185	2.6981
43	1.3016	1.6811	2.0167	2.4163	2.6951
44	1.3011	1.6802	2.0154	2.4141	2.6923
45	1.3006	1.6794	2.0141	2.4121	2.6896
46	1.3002	1.6787	2.0129	2.4102	2.6870
47	1.2998	1.6779	2.0117	2.4083	2.6846
48	1.2994	1.6772	2.0106	2.4066	2.6822
49	1.2991	1.6766	2.0096	2.4049	2.6800
50	1.2987	1.6759	2.0086	2.4033	2.6778

df	Tail Area α .10	.05	.025	.01	.005
51	1.2984	1.6753	2.0076	2.4017	2.6757
52	1.2980	1.6747	2.0066	2.4002	2.6737
53	1.2977	1.6741	2.0057	2.3988	2.6718
54	1.2974	1.6736	2.0049	2.3974	2.6700
55	1.2971	1.6730	2.0040	2.3961	2.6682
56	1.2969	1.6725	2.0032	2.3948	2.6665
57	1.2966	1.6720	2.0025	2.3936	2.6649
58	1.2963	1.6716	2.0017	2.3924	2.6633
59	1.2961	1.6711	2.0010	2.3912	2.6618
60	1.2958	1.6706	2.0003	2.3901	2.6603
61	1.2956	1.6702	1.9996	2.3890	2.6589
62	1.2954	1.6698	1.9990	2.3880	2.6575
63	1.2951	1.6694	1.9983	2.3870	2.6561
64	1.2949	1.6690	1.9977	2.3860	2.6549
65	1.2947	1.6686	1.9971	2.3851	2.6536
66	1.2945	1.6683	1.9966	2.3842	2.6524
67	1.2943	1.6679	1.9960	2.3833	2.6512
68	1.2941	1.6676	1.9955	2.3824	2.6501
69	1.2939	1.6672	1.9949	2.3816	2.6490
70	1.2938	1.6669	1.9944	2.3808	2.6479
71	1.2936	1.6666	1.9939	2.3800	2.6469
72	1.2934	1.6663	1.9935	2.3793	2.6459
73	1.2933	1.6660	1.9930	2.3785	2.6449
74	1.2931	1.6657	1.9925	2.3778	2.6439
75	1.2929	1.6654	1.9921	2.3771	2.6430
76	1.2928	1.6652	1.9917	2.3764	2.6421
77	1.2926	1.6649	1.9913	2.3758	2.6412
78	1.2925	1.6646	1.9908	2.3751	2.6403
79	1.2924	1.6644	1.9905	2.3745	2.6395
80	1.2922	1.6641	1.9901	2.3739	2.6387
81	1.2921	1.6639	1.9897	2.3733	2.6379
82	1.2920	1.6636	1.9893	2.3727	2.6371
83	1.2918	1.6634	1.9890	2.3721	2.6364
84	1.2917	1.6632	1.9886	2.3716	2.6356
85	1.2916	1.6630	1.9883	2.3710	2.6349
86	1.2915	1.6628	1.9879	2.3705	2.6342
87	1.2914	1.6626	1.9876	2.3700	2.6335
88	1.2912	1.6624	1.9873	2.3695	2.6329
89	1.2911	1.6622	1.9870	2.3690	2.6322
90	1.2910	1.6620	1.9867	2.3685	2.6316
91	1.2909	1.6618	1.9864	2.3680	2.6309
92	1.2908	1.6616	1.9861	2.3676	2.6303
93	1.2907	1.6614	1.9858	2.3671	2.6297
94	1.2906	1.6612	1.9855	2.3667	2.6291
95	1.2905	1.6611	1.9853	2.3662	2.6286
96	1.2904	1.6609	1.9850	2.3658	2.6280
97	1.2903	1.6607	1.9847	2.3654	2.6275
98	1.2902	1.6606	1.9845	2.3650	2.6269
99	1.2902	1.6604	1.9842	2.3646	2.6264
100	1.2901	1.6602	1.9840	2.3642	2.6259
∞	1.2816	1.6449	1.9600	2.3263	2.5758

Fuente: Cabilio, P. y J. Masaro (2001) Basic Statistical Procedures and Tables, 10th edition. Department of Mathematics and Statistics, Acadia University.

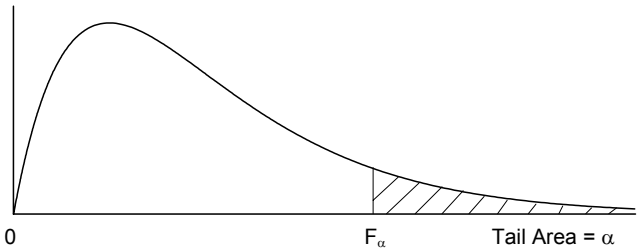
Upper Critical Values of the F-distribution with (ν_1, ν_2) df



		ν_1								
ν_2	α	1	2	3	4	5	6	7	8	9
1	.10	39.86	49.50	53.59	55.83	57.24	58.20	58.91	59.44	59.86
	.05	161.4	199.5	215.7	224.6	230.2	234.0	236.8	238.9	240.5
	.025	647.8	799.5	864.2	899.6	921.8	937.1	948.2	956.7	963.3
	.01	4052	5000	5403	5625	5764	5859	5928	5981	6022
	.005	16211	20000	20615	22500	23056	23437	23715	23925	24091
2	.10	8.53	9.00	9.16	9.24	9.29	9.33	9.35	9.37	9.38
	.05	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38
	.025	38.51	39.00	39.17	39.25	39.30	39.33	39.36	39.37	39.39
	.01	98.50	99.00	99.17	99.25	99.30	99.33	99.36	99.37	99.39
	.005	198.5	199.0	199.2	199.2	199.3	199.3	199.4	199.4	199.4
3	.10	5.54	5.46	5.39	5.34	5.31	5.28	5.27	5.25	5.24
	.05	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81
	.025	17.44	16.04	15.44	15.10	14.88	14.73	14.62	14.54	14.47
	.01	34.12	30.82	29.46	28.71	28.24	27.91	27.67	27.49	27.35
	.005	55.55	49.80	47.47	46.19	45.39	44.84	44.43	44.13	43.88
4	.10	4.54	4.32	4.19	4.11	4.05	4.01	3.98	3.95	3.94
	.05	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00
	.025	12.22	10.65	9.98	9.60	9.36	9.20	9.07	8.98	8.90
	.01	21.20	18.00	16.69	15.98	15.52	15.21	14.98	14.80	14.66
	.005	31.33	26.28	24.26	23.15	22.46	21.97	21.62	21.35	21.14
5	.10	4.06	3.78	3.62	3.52	3.45	3.40	3.37	3.34	3.32
	.05	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77
	.025	10.01	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.68
	.01	16.26	13.27	12.06	11.39	10.97	10.67	10.46	10.29	10.16
	.005	22.78	18.31	16.53	15.56	14.94	14.51	14.20	13.96	13.77
6	.10	3.78	3.46	3.29	3.18	3.11	3.05	3.01	2.98	2.96
	.05	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10
	.025	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.52
	.01	13.75	10.92	9.78	9.15	8.75	8.47	8.26	8.10	7.98
	.005	18.63	14.54	12.92	12.03	11.46	11.07	10.79	10.57	10.39
7	.10	3.59	3.26	3.07	2.96	2.88	2.83	2.78	2.75	2.72
	.05	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68
	.025	8.07	6.54	5.89	5.52	5.29	5.12	4.99	4.90	4.82
	.01	12.25	9.55	8.45	7.85	7.46	7.19	6.99	6.84	6.72
	.005	16.24	12.40	10.88	10.05	9.52	9.16	8.89	8.68	8.51
8	.10	3.46	3.11	2.92	2.81	2.73	2.67	2.62	2.59	2.56
	.05	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39
	.025	7.57	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.36
	.01	11.26	8.65	7.59	7.01	6.63	6.37	6.18	6.03	5.91
	.005	14.69	11.04	9.60	8.81	8.30	7.95	7.69	7.50	7.34
9	.10	3.36	3.01	2.81	2.69	2.61	2.55	2.51	2.47	2.44
	.05	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18
	.025	7.21	5.71	5.08	4.72	4.48	4.32	4.20	4.10	4.03
	.01	10.56	8.02	6.99	6.42	6.06	5.80	5.61	5.47	5.35
	.005	13.61	10.11	8.72	7.96	7.47	7.13	6.88	6.69	6.54

Fuente: Cabilio, P. y J. Masaro (2001) Basic Statistical Procedures and Tables, 10th edition. Department of Mathematics and Statistics, Acadia University.

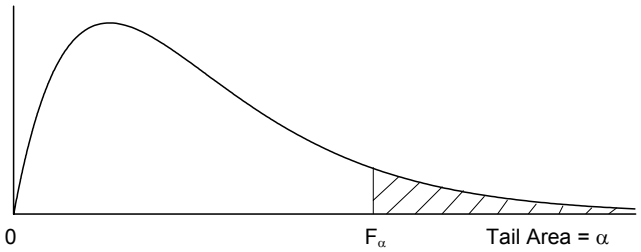
Upper Critical Values of the F-distribution with (ν_1, ν_2) df (continued)



		ν_1								
ν_2	α	10	12	15	20	24	30	60	120	∞
1	.10	60.19	60.71	61.22	61.74	62.00	62.26	62.79	63.06	63.33
	.05	241.9	243.9	245.9	248.0	249.1	250.1	252.2	253.3	254.3
	.025	968.6	976.7	984.9	993.1	997.2	1001	1010	1014	1018
	.01	6056	6106	6157	6209	6235	6261	6313	6339	6366
	.005	24224	24426	24630	24836	24940	25044	25253	25359	25465
2	.10	9.39	9.41	9.42	9.44	9.45	9.46	9.47	9.48	9.49
	.05	19.40	19.41	19.43	19.45	19.45	19.46	19.48	19.49	19.50
	.025	39.40	39.41	39.43	39.45	39.46	39.46	39.48	39.49	39.50
	.01	99.40	99.42	99.43	99.45	99.46	99.47	99.48	99.49	99.50
	.005	199.4	199.4	199.4	199.4	199.5	199.5	199.5	199.5	199.5
3	.10	5.23	5.22	5.20	5.18	5.18	5.17	5.15	5.14	5.13
	.05	8.79	8.74	8.70	8.66	8.64	8.62	8.57	8.55	8.53
	.025	14.42	14.34	14.25	14.17	14.12	14.08	13.99	13.95	13.90
	.01	27.23	27.05	26.87	26.69	26.60	26.50	26.32	26.22	26.13
	.005	43.69	43.39	43.08	42.78	42.62	42.47	42.15	41.99	41.83
4	.10	3.92	3.90	3.87	3.84	3.83	3.82	3.79	3.78	3.76
	.05	5.96	5.91	5.86	5.80	5.77	5.75	5.69	5.66	5.63
	.025	8.84	8.75	8.66	8.56	8.51	8.46	8.36	8.31	8.26
	.01	14.55	14.37	14.20	14.02	13.93	13.84	13.65	13.56	13.46
	.005	20.97	20.70	20.44	20.17	20.03	19.89	19.61	19.47	19.32
5	.10	3.30	3.27	3.24	3.21	3.19	3.17	3.14	3.12	3.10
	.05	4.74	4.68	4.62	4.56	4.53	4.50	4.43	4.40	4.36
	.025	6.62	6.52	6.43	6.33	6.28	6.23	6.12	6.07	6.02
	.01	10.05	9.89	9.72	9.55	9.47	9.38	9.20	9.11	9.02
	.005	13.62	13.38	13.15	12.90	12.78	12.66	12.40	12.27	12.14
6	.10	2.94	2.90	2.87	2.84	2.82	2.80	2.76	2.74	2.72
	.05	4.06	4.00	3.94	3.87	3.84	3.81	3.74	3.70	3.67
	.025	5.46	5.37	5.27	5.17	5.12	5.07	4.96	4.90	4.85
	.01	7.87	7.72	7.56	7.40	7.31	7.23	7.06	6.97	6.88
	.005	10.25	10.03	9.81	9.59	9.47	9.36	9.12	9.00	8.88
7	.10	2.70	2.67	2.63	2.59	2.58	2.56	2.51	2.49	2.47
	.05	3.64	3.57	3.51	3.44	3.41	3.38	3.30	3.27	3.23
	.025	4.76	4.67	4.57	4.47	4.42	4.36	4.25	4.20	4.14
	.01	6.62	6.47	6.31	6.16	6.07	5.99	5.82	5.74	5.65
	.005	8.38	8.18	7.97	7.75	7.65	7.53	7.31	7.19	7.08
8	.10	2.54	2.50	2.46	2.42	2.40	2.38	2.34	2.32	2.29
	.05	3.35	3.28	3.22	3.15	3.12	3.08	3.01	2.97	2.93
	.025	4.30	4.20	4.10	4.00	3.95	3.89	3.78	3.73	3.67
	.01	5.81	5.67	5.52	5.36	5.28	5.20	5.03	4.95	4.86
	.005	7.21	7.01	6.81	6.61	6.50	6.40	6.18	6.06	5.95
9	.10	2.42	2.38	2.34	2.30	2.28	2.25	2.21	2.18	2.16
	.05	3.14	3.07	3.01	2.94	2.90	2.86	2.79	2.75	2.71
	.025	3.96	3.87	3.77	3.67	3.61	3.56	3.45	3.39	3.33
	.01	5.26	5.11	4.96	4.81	4.73	4.65	4.48	4.40	4.31
	.005	6.42	6.23	6.03	5.83	5.73	5.62	5.41	5.30	5.19

Fuente: Cabilio, P. y J. Masaro (2001) Basic Statistical Procedures and Tables, 10th edition. Department of Mathematics and Statistics, Acadia University.

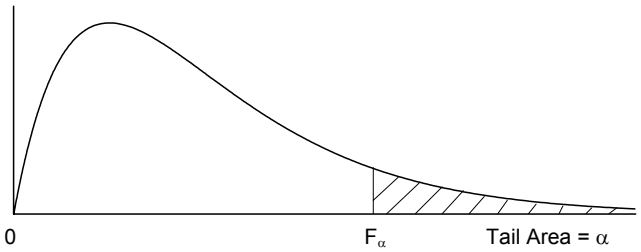
Upper Critical Values of the F-distribution with (ν_1, ν_2) df (continued)



		ν_1								
ν_2	α	1	2	3	4	5	6	7	8	9
10	**.10**	3.29	2.92	2.73	2.61	2.52	2.46	2.41	2.38	2.35
	.05	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02
	.025	6.94	5.46	4.83	4.47	4.24	4.07	3.95	3.85	3.78
	.01	10.0	7.56	6.55	5.99	5.64	5.39	5.20	5.06	4.94
	.005	12.8	9.43	8.08	7.34	6.87	6.54	6.30	6.12	5.97
12	**.10**	3.18	2.81	2.61	2.48	2.39	2.33	2.28	2.24	2.21
	.05	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80
	.025	6.55	5.10	4.47	4.12	3.89	3.73	3.61	3.51	3.44
	.01	9.33	6.93	5.95	5.41	5.06	4.82	4.64	4.50	4.39
	.005	11.8	8.51	7.23	6.52	6.07	5.76	5.52	5.35	5.20
15	**.10**	3.07	2.70	2.49	2.36	2.27	2.21	2.16	2.12	2.09
	.05	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59
	.025	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.12
	.01	8.68	6.36	5.42	4.89	4.56	4.32	4.14	4.00	3.89
	.005	10.8	7.70	6.48	5.80	5.37	5.07	4.85	4.67	4.54
20	**.10**	2.97	2.59	2.38	2.25	2.16	2.09	2.04	2.00	1.96
	.05	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39
	.025	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.84
	.01	8.10	5.85	4.94	4.43	4.10	3.87	3.70	3.56	3.46
	.005	9.94	6.99	5.82	5.17	4.76	4.47	4.26	4.09	3.96
24	**.10**	2.93	2.54	2.33	2.19	2.10	2.04	1.98	1.94	1.91
	.05	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30
	.025	5.72	4.32	3.72	3.38	3.15	2.99	2.87	2.78	2.70
	.01	7.82	5.61	4.72	4.22	3.90	3.67	3.50	3.36	3.26
	.005	9.55	6.66	5.52	4.89	4.49	4.20	3.99	3.83	3.69
30	**.10**	2.88	2.49	2.28	2.14	2.05	1.98	1.93	1.88	1.85
	.05	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21
	.025	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.57
	.01	7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	3.07
	.005	9.18	6.35	5.24	4.62	4.23	3.95	3.74	3.58	3.45
60	**.10**	2.79	2.39	2.18	2.04	1.95	1.87	1.82	1.77	1.74
	.05	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04
	.025	5.29	3.93	3.34	3.01	2.79	2.63	2.51	2.41	2.33
	.01	7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.72
	.005	8.49	5.79	4.73	4.14	3.76	3.49	3.29	3.13	3.01
120	**.10**	2.75	2.35	2.13	1.99	1.90	1.82	1.77	1.72	1.68
	.05	3.92	3.07	2.68	2.45	2.29	2.18	2.09	2.02	1.96
	.025	5.15	3.80	3.23	2.89	2.67	2.52	2.39	2.30	2.22
	.01	6.85	4.79	3.95	3.48	3.17	2.96	2.79	2.66	2.56
	.005	8.18	5.54	4.50	3.92	3.55	3.28	3.09	2.93	2.81
∞	**.10**	2.71	2.30	2.08	1.94	1.85	1.77	1.72	1.67	1.63
	.05	3.84	3.00	2.60	2.37	2.21	2.10	2.01	1.94	1.88
	.025	5.02	3.69	3.12	2.79	2.57	2.41	2.29	2.19	2.11
	.01	6.63	4.61	3.78	3.32	3.02	2.80	2.64	2.51	2.41
	.005	7.88	5.30	4.28	3.72	3.35	3.09	2.90	2.74	2.62

Fuente: Cabilio, P. y J. Masaro (2001) Basic Statistical Procedures and Tables, 10th edition. Department of Mathematics and Statistics, Acadia University.

Upper Critical Values of the F-distribution with (ν_1, ν_2) df (continued)



		ν_1								
ν_2	α	10	12	15	20	24	30	60	120	∞
10	.10	2.32	2.28	2.24	2.20	2.18	2.16	2.11	2.08	2.06
	.05	2.98	2.91	2.85	2.77	2.74	2.70	2.62	2.58	2.54
	.025	3.72	3.62	3.52	3.42	3.37	3.31	3.20	3.14	3.08
	.01	4.85	4.71	4.56	4.41	4.33	4.25	4.08	4.00	3.91
	.005	5.85	5.66	5.47	5.27	5.17	5.07	4.86	4.75	4.64
12	.10	2.19	2.15	2.10	2.06	2.04	2.01	1.96	1.93	1.90
	.05	2.75	2.69	2.62	2.54	2.51	2.47	2.38	2.34	2.30
	.025	3.37	3.28	3.18	3.07	3.02	2.96	2.85	2.79	2.72
	.01	4.30	4.16	4.01	3.86	3.78	3.70	3.54	3.45	3.36
	.005	5.09	4.91	4.72	4.53	4.43	4.33	4.12	4.01	3.90
15	.10	2.06	2.02	1.97	1.92	1.90	1.87	1.82	1.79	1.76
	.05	2.54	2.48	2.40	2.33	2.29	2.25	2.16	2.11	2.07
	.025	3.06	2.96	2.86	2.76	2.70	2.64	2.52	2.46	2.40
	.01	3.80	3.67	3.52	3.37	3.29	3.21	3.05	2.96	2.87
	.005	4.42	4.25	4.07	3.88	3.79	3.69	3.48	3.37	3.26
20	.10	1.94	1.89	1.84	1.79	1.77	1.74	1.68	1.64	1.61
	.05	2.35	2.28	2.20	2.12	2.08	2.04	1.95	1.90	1.84
	.025	2.77	2.68	2.57	2.46	2.41	2.35	2.22	2.16	2.09
	.01	3.37	3.23	3.09	2.94	2.86	2.78	2.61	2.52	2.42
	.005	3.85	3.68	3.50	3.32	3.22	3.12	2.92	2.81	2.69
24	.10	1.88	1.83	1.78	1.73	1.70	1.67	1.61	1.57	1.53
	.05	2.25	2.18	2.11	2.03	1.98	1.94	1.84	1.79	1.73
	.025	2.64	2.54	2.44	2.33	2.27	2.21	2.08	2.01	1.94
	.01	3.17	3.03	2.89	2.74	2.66	2.58	2.40	2.31	2.21
	.005	3.59	3.42	3.25	3.06	2.97	2.87	2.66	2.55	2.43
30	.10	1.82	1.77	1.72	1.67	1.64	1.61	1.54	1.50	1.46
	.05	2.16	2.09	2.01	1.93	1.89	1.84	1.74	1.68	1.62
	.025	2.51	2.41	2.31	2.20	2.14	2.07	1.94	1.87	1.79
	.01	2.98	2.84	2.70	2.55	2.47	2.39	2.21	2.11	2.01
	.005	3.34	3.18	3.01	2.82	2.73	2.63	2.42	2.30	2.18
60	.10	1.71	1.66	1.60	1.54	1.51	1.48	1.40	1.35	1.29
	.05	1.99	1.92	1.84	1.75	1.70	1.65	1.53	1.47	1.39
	.025	2.27	2.17	2.06	1.94	1.88	1.82	1.67	1.58	1.48
	.01	2.63	2.50	2.35	2.20	2.12	2.03	1.84	1.73	1.60
	.005	2.90	2.74	2.57	2.39	2.29	2.19	1.96	1.83	1.69
120	.10	1.65	1.60	1.55	1.48	1.45	1.41	1.32	1.26	1.19
	.05	1.91	1.83	1.75	1.66	1.61	1.55	1.43	1.35	1.25
	.025	2.16	2.05	1.94	1.82	1.76	1.69	1.53	1.43	1.31
	.01	2.47	2.34	2.19	2.03	1.95	1.86	1.66	1.53	1.38
	.005	2.71	2.54	2.37	2.19	2.09	1.98	1.75	1.61	1.43
∞	.10	1.60	1.55	1.49	1.42	1.38	1.34	1.24	1.17	1.00
	.05	1.83	1.75	1.67	1.57	1.52	1.46	1.32	1.22	1.00
	.025	2.05	1.94	1.83	1.71	1.64	1.57	1.39	1.27	1.00
	.01	2.32	2.18	2.04	1.88	1.79	1.70	1.47	1.32	1.00
	.005	2.52	2.36	2.19	2.00	1.90	1.79	1.53	1.36	1.00

Fuente: Cabilio, P. y J. Masaro (2001) Basic Statistical Procedures and Tables, 10th edition. Department of Mathematics and Statistics, Acadia University.

Table Critical Values of X^2

df = K – 1 for the chi-square goodness-of-fit test. K is the number of categories.

df = (R – 1)(C – 1) for the chi-square test of independence. R is the number of rows; C is thenumber of columns.

LS / DF	Level of significance					
	0.2	**0.1**	**0.05**	**0.02**	**0.01**	**0.001**
1	1.642	2.706	3.841	5.412	6.635	10.828
2	3.219	4.605	5.991	7.824	9.210	13.816
3	4.642	6.251	7.815	9.837	11.345	16.266
4	5.989	7.779	9.488	11.668	13.277	18.467
5	7.289	9.236	11.070	13.388	15.086	20.515
6	8.558	10.645	12.592	15.033	16.812	22.458
7	9.803	12.017	14.067	16.622	18.475	24.322
8	11.030	13.362	15.507	18.168	20.090	26.124
9	12.242	14.684	16.919	19.679	21.666	27.877
10	13.442	15.987	18.307	21.161	23.209	29.588
11	14.631	17.275	19.675	22.618	24.725	31.264
12	15.812	18.549	21.026	24.054	26.217	32.909
13	16.985	19.812	22.362	25.472	27.688	34.528
14	18.151	21.064	23.685	26.873	29.141	36.123
15	19.311	22.307	24.996	28.259	30.578	37.697
16	20.465	23.542	26.296	29.633	32.000	39.252
17	21.615	24.769	27.587	30.995	33.409	40.790
18	22.760	25.989	28.869	32.346	34.805	42.312
19	23.900	27.204	30.144	33.687	36.191	43.820
20	25.038	28.412	31.410	35.020	37.566	45.315
21	26.171	29.615	32.671	36.343	38.932	46.797
22	27.301	30.813	33.924	37.659	40.289	48.268
23	28.429	32.007	35.172	38.968	41.638	49.728
24	29.553	33.196	36.415	40.270	42.980	51.179
25	30.675	34.382	37.652	41.566	44.314	52.620
26	31.795	35.563	38.885	42.856	45.642	54.052
27	32.912	36.741	40.113	44.140	46.963	55.476
28	34.027	37.916	41.337	45.419	48.278	56.892
29	35.139	39.087	42.557	46.693	49.588	58.301
30	36.250	40.256	43.773	47.962	50.892	59.703

Adaptada de *Hopkins, K.D., Hopkins, B.R. y Glass, G.V. (1997, 3ª ed). Estadística Básica para las Ciencias Sociales y del Comportamiento. México: Prentice-Hall*