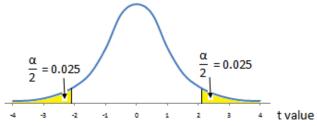


## Student's t Distribution Table

For example, the t value for 18 degrees of freedom is 2.101 for 95% confidence interval (2-Tail  $\alpha$  = 0.05).



	90%	95%	97.5%	99%	99.5%	99.95%	1-Tail Confidence Level
	80%	90%	95%	98%	99%	99.9%	2-Tail Confidence Level
	0.100	0.050	0.025	0.010	0.005	0.0005	1-Tail Alpha
df	0.20	0.10	0.05	0.02	0.01	0.001	2-Tail Alpha
1	3.0777	6.3138	12.7062	31.8205	63.6567	636.6192	
2	1.8856	2.9200	4.3027	6.9646	9.9248	31.5991	
3	1.6377	2.3534	3.1824	4.5407	5.8409	12.9240	
4	1.5332	2.1318	2.7764	3.7469	4.6041	8.6103	
5	1.4759	2.0150	2.5706	3.3649	4.0321	6.8688	
6	1.4398	1.9432	2.4469	3.1427	3.7074	5.9588	
7	1.4149	1.8946	2.3646	2.9980	3.4995	5.4079	
8	1.3968	1.8595	2.3060	2.8965	3.3554	5.0413	
9	1.3830	1.8331	2.2622	2.8214	3.2498	4.7809	
10	1.3722	1.8125	2.2281	2.7638	3.1693	4.5869	
11	1.3634	1.7959	2.2010	2.7181	3.1058	4.4370	
12	1.3562	1.7823	2.1788	2.6810	3.0545	4.3178	
13	1.3502	1.7709	2.1604	2.6503	3.0123	4.2208	
14	1.3450	1.7613	2.1448	2.6245	2.9768	4.1405	
15	1.3406	1.7531	2.1314	2.6025	2.9467	4.0728	
16	1.3368	1.7459	2.1199	2.5835	2.9208	4.0150	
17	1.3334	1.7396	2.1098	2.5669	2.8982	3.9651	
18	1.3304	1.7341	2.1009	2.5524	2.8784	3.9216	
19	1.3277	1.7291	2.0930	2.5395	2.8609	3.8834	
20	1.3253	1.7247	2.0860	2.5280	2.8453	3.8495	
21	1.3232	1.7207	2.0796	2.5176	2.8314	3.8193	
22	1.3212	1.7171	2.0739	2.5083	2.8188	3.7921	
23	1.3195	1.7139	2.0687	2.4999	2.8073	3.7676	
24	1.3178	1.7109	2.0639	2.4922	2.7969	3.7454	
25	1.3163	1.7081	2.0595	2.4851	2.7874	3.7251	
26	1.3150	1.7056	2.0555	2.4786	2.7787	3.7066	
27	1.3137	1.7033	2.0518	2.4727	2.7707	3.6896	
28	1.3125	1.7011	2.0484	2.4671	2.7633	3.6739	
29	1.3114	1.6991	2.0452	2.4620	2.7564	3.6594	
30	1.3104	1.6973	2.0423	2.4573	2.7500	3.6460	

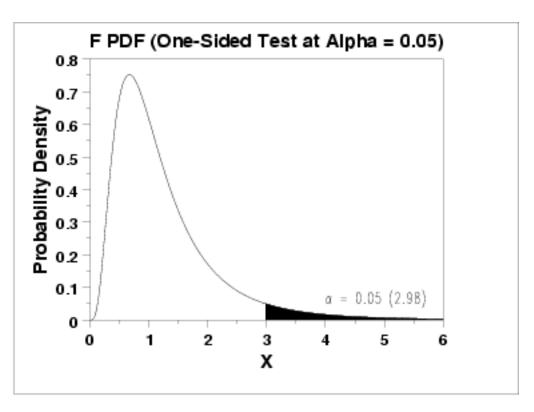
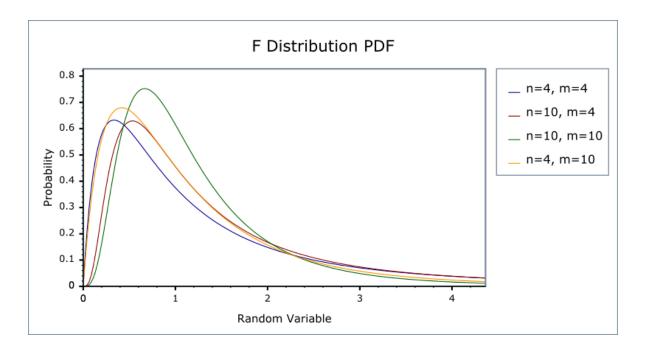
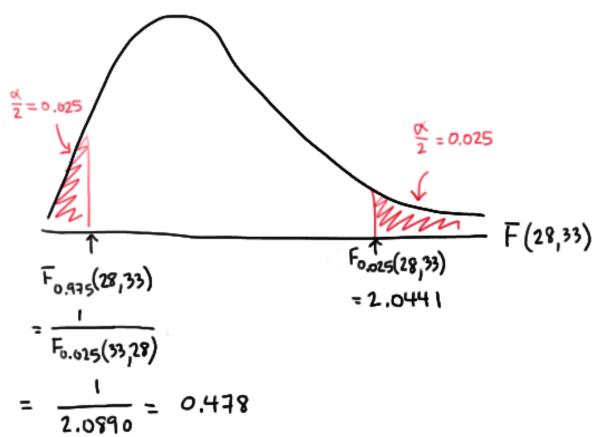
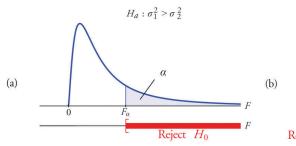
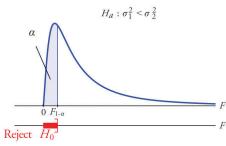


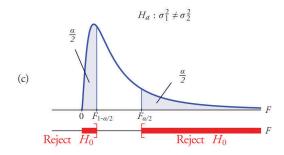
	Table (	of Prob	abilities	s for St	udent's	t-Distr	ibution	
df	0.600	0.700	0.800	0.900	0.950	0.975	0.990	0.995
1	0.325	0.727	1.376	3.078	6.314	12.706	31.821	63.657
2	0.289	0.617	1.061	1.886	2.920	4.303	6.965	9.925
3	0.277	0.584	0.978	1.638	2.353	3.182	4.541	5.841
4	0.271	0.569	0.941	1.533	2.132	2.776	3.747	4.604
5	0.267	0.559	0.920	1.476	2.015	2.571	3.365	4.032
6	0.265	0.553	0.906	1.440	1.943	2.447	3.143	3.707
7	0.263	0.549	0.896	1.415	1.895	2.365	2.998	3.499
8	0.262	0.546	0.889	1.397	1.860	2.306	2.896	3.355
9	0.261	0.543	0.883	1.383	1.833	2.262	2.821	3.250
10	0.260	0.542	0.879	1.372	1.812	2.228	2.764	3.169
11	0.260	0.540	0.876	1.363	1.796	2.201	2.718	3.106
12	0.259	0.539	0.873	1.356	1.782	2.179	2.681	3.055
13	0.259	0.538	0.870	1.350	1.771	2.160	2.650	3.012
14	0.258	0.537	0.868	1.345	1.761	2.145	2.624	2.977
15	0.258	0.536	0.866	1.341	1.753	2.131	2.602	2.947
16	0.258	0.535	0.865	1.337	1.746	2.120	2.583	2.921
17	0.257	0.534	0.863	1.333	1.740	2.110	2.567	2.898
18	0 257	0.534	በ ጸ62	1 330	1 734	2 101	2 552	2 878





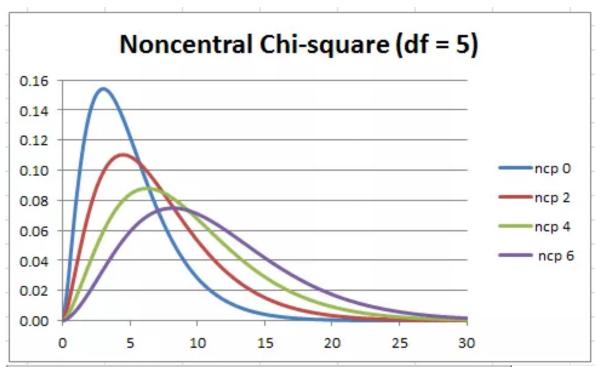


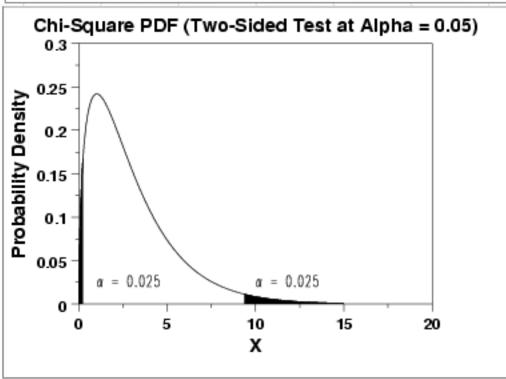




## Percentage Points of the Chi-Square Distribution

Degrees of	Probability of a larger value of x 2									
Freedom	0.99	0.95	0.90	0.75	0.50	0.25	0.10	0.05	0.01	
1	0.000	0.004	0.016	0.102	0.455	1.32	2.71	3.84	6.63	
2	0.020	0.103	0.211	0.575	1.386	2.77	4.61	5.99	9.21	
3	0.115	0.352	0.584	1.212	2.366	4.11	6.25	7.81	11.34	
4	0.297	0.711	1.064	1.923	3.357	5.39	7.78	9.49	13.28	
5	0.554	1.145	1.610	2.675	4.351	6.63	9.24	11.07	15.09	
6	0.872	1.635	2.204	3.455	5.348	7.84	10.64	12.59	16.81	
7	1.239	2.167	2.833	4.255	6.346	9.04	12.02	14.07	18.48	
8	1.647	2.733	3.490	5.071	7.344	10.22	13.36	15.51	20.09	
9	2.088	3.325	4.168	5.899	8.343	11.39	14.68	16.92	21.67	
10	2.558	3.940	4.865	6.737	9.342	12.55	15.99	18.31	23.21	
11	3.053	4.575	5.578	7.584	10.341	13.70	17.28	19.68	24.72	
12	3.571	5.226	6.304	8.438	11.340	14.85	18.55	21.03	26.22	
13	4.107	5.892	7.042	9.299	12.340	15.98	19.81	22.36	27.69	
14	4.660	6.571	7.790	10.165	13.339	17.12	21.06	23.68	29.14	
15	5.229	7.261	8.547	11.037	14.339	18.25	22.31	25.00	30.58	
16	5.812	7.962	9.312	11.912	15.338	19.37	23.54	26.30	32.00	
17	6.408	8.672	10.085	12.792	16.338	20.49	24.77	27.59	33.41	
18	7.015	9.390	10.865	13.675	17.338	21.60	25.99	28.87	34.80	
19	7.633	10.117	11.651	14.562	18.338	22.72	27.20	30.14	36.19	
20	8.260	10.851	12.443	15.452	19.337	23.83	28.41	31.41	37.57	
22	9.542	12.338	14.041	17.240	21.337	26.04	30.81	33.92	40.29	
24	10.856	13.848	15.659	19.037	23.337	28.24	33.20	36.42	42.98	
26	12.198	15.379	17.292	20.843	25.336	30.43	35.56	38.89	45.64	
28	13.565	16.928	18.939	22.657	27.336	32.62	37.92	41.34	48.28	
30	14.953	18.493	20.599	24.478	29.336	34.80	40.26	43.77	50.89	
40	22.164	26.509	29.051	33.660	39.335	45.62	51.80	55.76	63.69	
50	27.707	34.764	37.689	42.942	49.335	56.33	63.17	67.50	76.15	
60	37.485	43.188	46.459	52.294	59.335	66.98	74.40	79.08	88.38	





Nature of Question	Number of Independent Variables	Number of Dependent Variables	Number of Control Variables (covariates)	Type of Score Independent/ Dependent Variables	Distribution of Scores	Statistical Test	What the Test Yields
Group comparison	1	1	0	Categorical/ continuous	Normal	t-test	A comparison of two groups in terms of outcomes
Group comparison	1 or more	1	0	Categorical/ continuous	Normal	Analysis of variance	A comparison of more than two groups in terms of outcomes
Group comparison	1 or more	1	1	Categorical/ continuous	Normal	Analysis of covariance (ANCOVA)	A comparison of more than two groups in terms of outcomes, controlling for covariates
Association between groups	1	1	0	Categorical/ categorical	Non-normal	Chi-square	An association between two variables measured by categories
Relate variables	1	1	0	Continuous/ continuous	Normal	Pearson product moment correlation	Tells you the magnitude and direction of association between two variables measured on an interval (or ratio) scale
Relate variables	2 or more	1	0	Continuous/ continuous	Normal	Multiple regression	Learn about the relationship between several predictor or independent variables and an outcome variable. It provides the relative prediction of one variable among many in terms of the outcome