c is a confidence level

Area c

One-tail area

Right-tail area

Left-tail area

Two-tail area

Area

Critical Values for Student's *t* Distribution

one-tail area		0.250	0.125	0.100	0.075	0.050	0.025	0.010	0.005	0.0005
two-tail area		0.500	0.250	0.200	0.150	0.100	0.050	0.020	0.010	0.0010
d.f.	c	0.500	0.750	0.800	0.850	0.900	0.950	0.980	0.990	0.999
1		1.000	2.414	3.078	4.165	6.314	12.706	31.821	63.657	636.619
2		0.816	1.604	1.886	2.282	2.920	4.303	6.965	9.925	31.599
3		0.765	1.423	1.638	1.924	2.353	3.182	4.541	5.841	12.924
4		0.741	1.344	1.533	1.778	2.132	2.776	3.747	4.604	8.610
5		0.727	1.301	1.476	1.699	2.015	2.571	3.365	4.032	6.869
6		0.718	1.273	1.440	1.650	1.943	2.447	3.143	3.707	5.959
7		0.711	1.254	1.415	1.617	1.895	2.365	2.998	3.499	5.408
8		0.706	1.240	1.397	1.592	1.860	2.306	2.896	3.355	5.041
9		0.703	1.230	1.383	1.574	1.833	2.262	2.821	3.250	4.781
10		0.700	1.221	1.372	1.559	1.812	2.228	2.764	3.169	4.587
11		0.697	1.214	1.363	1.548	1.796	2.201	2.718	3.106	4.437
12		0.695	1.209	1.356	1.538	1.782	2.179	2.681	3.055	4.318
13		0.694	1.204	1.350	1.530	1.771	2.160	2.650	3.012	4.221
14		0.692	1.200	1.345	1.523	1.761	2.145	2.624	2.977	4.140
15		0.691	1.197	1.341	1.517	1.753	2.131	2.602	2.947	4.073
16		0.690	1.194	1.337	1.512	1.746	2.120	2.583	2.921	4.015
17		0.689	1.191	1.333	1.508	1.740	2.110	2.567	2.898	3.965
18		0.688	1.189	1.330	1.504	1.734	2.101	2.552	2.878	3.922
19		0.688	1.187	1.328	1.500	1.729	2.093	2.539	2.861	3.883
20		0.687	1.185	1.325	1.497	1.725	2.086	2.528	2.845	3.850
21		0.686	1.183	1.323	1.494	1.721	2.080	2.518	2.831	3.819
22		0.686	1.182	1.321	1.492	1.717	2.074	2.508	2.819	3.792
23		0.685	1.180	1.319	1.489	1.714	2.069	2.500	2.807	3.768
24		0.685	1.179	1.318	1.487	1.711	2.064	2.492	2.797	3.745
25		0.684	1.198	1.316	1.485	1.708	2.060	2.485	2.787	3.725
26		0.684	1.177	1.315	1.483	1.706	2.056	2.479	2.779	3.707
27		0.684	1.176	1.314	1.482	1.703	2.052	2.473	2.771	3.690
28		0.683	1.175	1.313	1.480	1.701	2.048	2.467	2.763	3.674
29		0.683	1.174	1.311	1.479	1.699	2.045	2.462	2.756	3.659
30		0.683	1.173	1.310	1.477	1.697	2.042	2.457	2.750	3.646
35		0.682	1.170	1.306	1.472	1.690	2.030	2.438	2.724	3.591
40		0.681	1.167	1.303	1.468	1.684	2.021	2.423	2.704	3.551
45		0.680	1.165	1.301	1.465	1.679	2.014	2.412	2.690	3.520
50		0.679	1.164	1.299	1.462	1.676	2.009	2.403	2.678	3.496
60		0.679	1.162	1.296	1.458	1.671	2.000	2.390	2.660	3.460
70		0.678	1.160	1.294	1.456	1.667	1.994	2.381	2.648	3.435
80		0.678	1.159	1.292	1.453	1.664	1.990	2.374	2.639	3.416
100		0.677	1.157	1.290	1.451	1.660	1.984	2.364	2.626	3.390
500		0.675	1.152	1.283	1.442	1.648	1.965	2.334	2.586	3.310
1000		0.675	1.151	1.282	1.441	1.646	1.962	2.330	2.581	3.300
∞		0.674	1.150	1.282	1.440	1.645	1.960	2.326	2.576	3.291

For degrees of freedom *d.f.* not in the table, use the closest *d.f.* that is *smaller*.