

T-table Worksheet

Name: _____

Find the appropriate degrees of freedom, df , from the table for the following sample sizes:

1. $n = 5$ $df =$ _____

2. $n = 12$ $df =$ _____

3. $n = 83$ $df =$ _____

4. $n = 29$ $df =$ _____

Find the critical value (t -value) for the following situations:

1. 90% confidence interval with $df = 10$

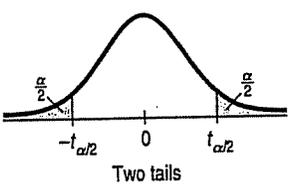
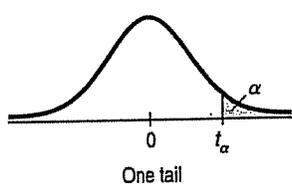
2. 99% confidence interval with $df = 44$

3. 98% confidence interval with a sample of size $n = 3$

4. 95% confidence interval with a sample of size $n = 10$

5. 80% confidence interval with $df = 47$

A-100 Appendix E • Tables

Two tail probability One tail probability		0.20 0.10	0.10 0.05	0.05 0.025	0.02 0.01	0.01 0.005	df
Table T							
Values of t_α							
							
Two tails							
							
One tail							
1	3.078	6.314	12.706	31.821	63.657	1	
2	1.886	2.920	4.303	6.965	9.925	2	
3	1.638	2.353	3.182	4.541	5.841	3	
4	1.533	2.132	2.776	3.747	4.604	4	
5	1.476	2.015	2.571	3.365	4.032	5	
6	1.440	1.943	2.447	3.143	3.707	6	
7	1.415	1.895	2.365	2.998	3.499	7	
8	1.397	1.860	2.306	2.896	3.355	8	
9	1.383	1.833	2.262	2.821	3.250	9	
10	1.372	1.812	2.228	2.764	3.169	10	
11	1.363	1.796	2.201	2.718	3.106	11	
12	1.356	1.782	2.179	2.681	3.055	12	
13	1.350	1.771	2.160	2.650	3.012	13	
14	1.345	1.761	2.145	2.624	2.977	14	
15	1.341	1.753	2.131	2.602	2.947	15	
16	1.337	1.746	2.120	2.583	2.921	16	
17	1.333	1.740	2.110	2.567	2.898	17	
18	1.330	1.734	2.101	2.552	2.878	18	
19	1.328	1.729	2.093	2.539	2.861	19	
20	1.325	1.725	2.086	2.528	2.845	20	
21	1.323	1.721	2.080	2.518	2.831	21	
22	1.321	1.717	2.074	2.508	2.819	22	
23	1.319	1.714	2.069	2.500	2.807	23	
24	1.318	1.711	2.064	2.492	2.797	24	
25	1.316	1.708	2.060	2.485	2.787	25	
26	1.315	1.706	2.056	2.479	2.779	26	
27	1.314	1.703	2.052	2.473	2.771	27	
28	1.313	1.701	2.048	2.467	2.763	28	
29	1.311	1.699	2.045	2.462	2.756	29	
30	1.310	1.697	2.042	2.457	2.750	30	
32	1.309	1.694	2.037	2.449	2.738	32	
35	1.306	1.690	2.030	2.438	2.725	35	
40	1.303	1.684	2.021	2.423	2.704	40	
45	1.301	1.679	2.014	2.412	2.690	45	
50	1.299	1.676	2.009	2.403	2.678	50	
60	1.296	1.671	2.000	2.390	2.660	60	
75	1.293	1.665	1.992	2.377	2.643	75	
100	1.290	1.660	1.984	2.364	2.626	100	
120	1.289	1.658	1.980	2.358	2.617	120	
140	1.288	1.656	1.977	2.353	2.611	140	
180	1.286	1.653	1.973	2.347	2.603	180	
250	1.285	1.651	1.969	2.341	2.596	250	
400	1.284	1.649	1.966	2.336	2.588	400	
1000	1.282	1.646	1.962	2.330	2.581	1000	
∞	1.282	1.645	1.960	2.326	2.576	∞	
Confidence levels		80%	90%	95%	98%	99%	