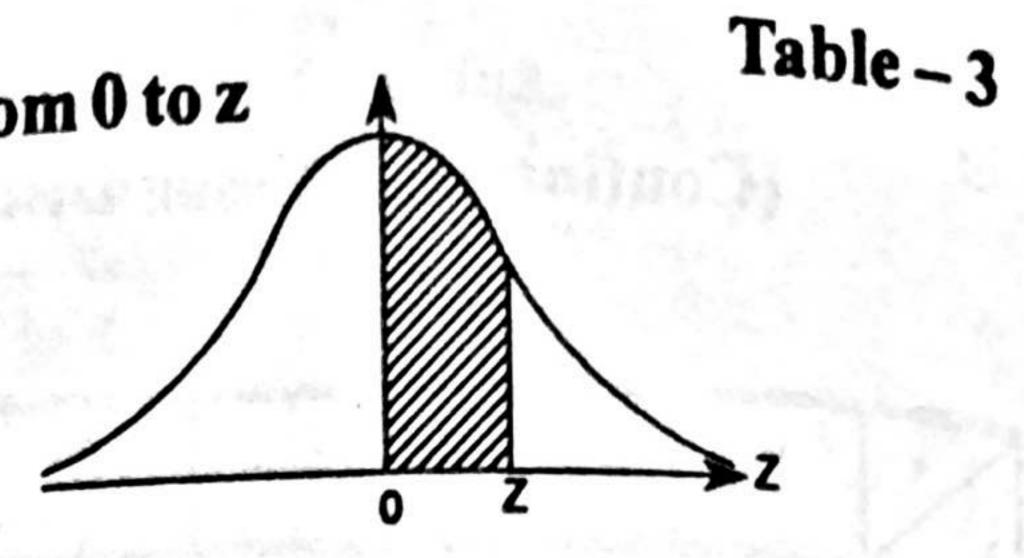
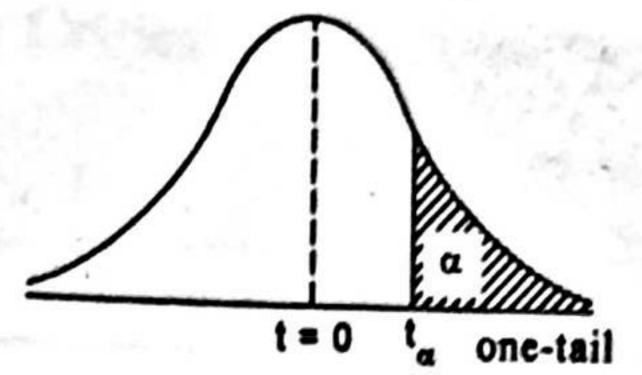
Areas under the Standard Normal Curve from 0 to z

$$z = \frac{x - \mu}{\sigma}$$



	0		2 886	3 870	4	5	6		8	9
					0160	.0199	.0239	.0279	.0319	.0359
0.0	.0000	.0040	.0080	.0120	.0160	.0596	.0636	.0675	.0714	.0754
0.1	.0398	.0438	.0478	.0517	.0557	.0987	.1026	.1064	.1103	.1141
0.2	.0793	.0832	.0871	.0910	.0948	.1368	.1406	.1443	.1480	.1517
0.3	.1179	.1217	.1256	.1293	.1331	.1736	.1772	.1808	.1844	.1879
0.4	.1554	.1591	.1628	.1664	.1700	5 14 30	g aş	H.d	190ye 3	107
0.5	.1916	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224
0.6	.2258	.2291	.2324	.2357	.2389	.2422	.2454	.2486	.2518	.2649
0.7	.2580	.2612	.2642	.2673	.2704	.2734	.2764	.2794	.2823	.2852
0.8	.2881	.2910	.2939	.2967	.2996	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389
16.7		(1) · · · · · · · · · · · · · · · · · · ·	20 T		.3508	.3531	.3554	.3577	.3599	.3621
1.0	.3413	.3438	.3461	.3485		.3749	.3770	.3790	.3810	.3830
1.1	.3643	.3665	.3686	.3708	.3729	.3944	.3962	.3980	.3997	.4015
1.2	.3849	.3869	.3888	.3907	.3925		.4131	.4147	.4162	.4177
1.3	.4032	.4049	.4066	.4082	.4099	.4115	.4279	.4292	.4306	2000
1.4	.4192	.4207	.4222	.4236	.4251	.4265	50 1 1 1 1 E	\$ G	KME O 1 A	.4319
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406	.4418	.4429	.4441
1,6	.4452	.4463	.4474	.4484	.4495	.4505	.4515	.4525	.4535	.454
1.7	.4654	.4564	.4573	.4582	.4591	.4599	.4608	.4616	.4625	.4633
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686	.4693	.4699	.470
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750	.4756	.4761	.4767
2.0	.4772	.4778	.4783	.4788	.4793	.4798	.4803	.4808	.4812	.481
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846	.4850	.4854	.485
2.2	.4861	.4864	.4868	.4871	.4875	.4878	.4881	.4884	.4887	.489
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909	.4911	.4913	.491
2.4	.4918	.4920	.4922	.4925	.4927	.4929	.4931	.4932	.4934	.493
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948	.4949	11 8 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
2.6	.4953	.4955	4956	.4957	.4959	.4960	.4961	Sinte .	.4951	.495
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971	.4962	.4963	.496
2.8	.4974	.4975	.4976	.4977	.4979	.4978	.4979	.4972	.4973	.497
2.9	.4981	.4982	.4982	.4983	.4984	.4984	.4985	.4979	.4980	.498 .498
2.0	4000	4000		便身 : M	E.0 45	0 1 18	6.6 1 4	69.0	THE	£16.0
3.0	.4987	.4987	.4987	.4988	.4988	.4989	.4989	.4989	.4990	.499
3.1	.4990	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4993	.499
3.2	.4993	.4993	.4994	.4994	.4994	.4994	.4994	.4995	.4995	.499
3.3	.4995	.4995	.4995	.4996	.4996	.4996	.4996	.4996	.4996	.499
3.4	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.499
3.5	.4998	.4998	.4998	.4998	.4998	.4998	.4998	.4998	4000	400
3.6	.4998	.4998	.4999	.4999	.4999	,4999	.4999	.4999	.4998	.499
3.7	.4999	.4999	.4999	.4999	.4999	.4999	.4999			.499
3.8	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999		.499
3.9	.5000	.5000	.5000	.5000	.5000	.5000	.4779	.4999	.4999	.499

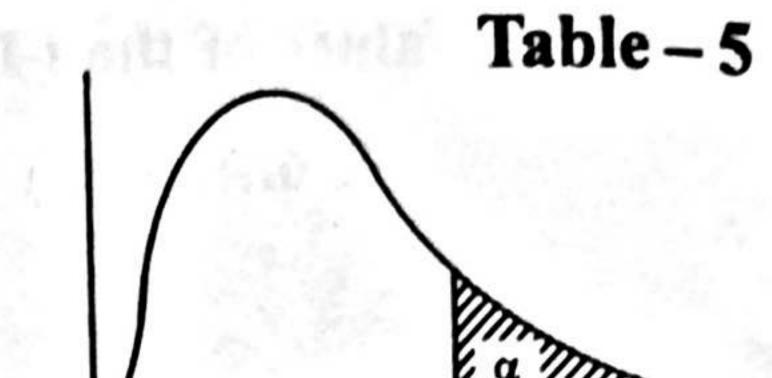
. Critical Values of the t-Distribution with v Degrees of Freedom Table - 4



				_				α						
٧	0.40		0.30	The same	0.20		0.15	v.2	0.10	0.	05	0.025	0.01	0.00
	0.325		0.727	230	1.376		1.963	- 0-	3.078	6.3	14	12.706	31.821	63.65
,	0.289		0.617	(6.1	1.061		1.386	40	1.886	2.9		4.303	6.965	9.925
3	0.277	N. A.	0.584	1	0.978		1.250		1.638	2.3		3.182	4.541	5.841
1	0.271		0.569	8.	0.941		1.190	-	1.533	2.1		2.776	3.747	4.604
3	0.267	6,94	0.559	.0	0.920		1.156		1.476	2.0		2.571	3.365	4.032
	A .	(3.6			1 1		1.150		, 1.470	2.0	,,	2.571		
6	0.265		0.553		0.906		1.134		1.440	1.9	43	2.447	3.143	3.707
7	0.263	FRA	0.549	6.	0.896		1.119		1.415	1.8		2.365	2.998	3.499
8	0.262	12.8	0.546		0.889		1.108		1.397	1.8	1.55	2.306	2.896	3.355
9	0.261	2 4 3	0.543	8.4	0.883		1.100		1.383	1.8		2.262	2.821	3.250
10	0.260		0.542		0.879		1.093		1.372	1.8		2.228	2.764	3.169
		Time to				ing Til						%	19 July 1 1 1	4 100
11	0.260	33.0	0.540		0.876		1.088	19.	1.363	1.79	96	2.201	2.718	3.106
12	0.259		0.539		0.873	1	1.083	40	1.356	1.78	82	2.179	2.681	3.055
13	0.259	184	0.537	-	0.870		1.079	- J.	1.350	1.77	71	2.160	2.650	3.012
14	0.258	18.5	0.537	1	0.868	. 6	1.076	1	1.345	1.76	51	2.145	2.624	2.977
15	0.258	27	0.536	S.	0.866		1.074		1.341	1.75	53	2.131	2.602	2.947
70		2.70	. 4	T.	- (*)	ç	1.5		1000	4.6	7.5	0.100	2 502	2.921
16	0.258	28.6	0.535	p.5.5	0.865		1.071		1.337	1.74	4.5	2.120	2.583	2.898
17	0.257	9.	0.534	-	0.863		1.069		1.333	1.74	1,0	2.110	2.567	2.878
18	0.257		0.534	34	0.862		1.067		1.330	1.73		2.101	2.552	2.861
19	0.257	1.34	0.533	4	0.861		1.066		1.328	1.72	619 <u>04</u> 0	2.093	2.539	2.845
20	0.257	3.5	0.533	2	0.860		1.064		1.325	1.72	5 · /E	2.086	2.326	2.043
1.	**	15.5	0 (12	2	0.060		1.063		1.323	1.72	1	2.080	2.518	2.831
21	0.257	2.43	0.532	52	0.859		1.061	4	1.321	1.71		2.074	2.508	2.819
22	0.256	74.5	0.532	P	0.858		1.060		1.319	1.71	1 1 2	2.069	2.500	2.807
23	0.256	1	0.532		0.858 0.857		1.059	-	1.318	1.71		.2.064	2.492	2:797
24	0.256	136	0.531		0.856		1.058		1.316	1.70		2.060	2.485	2.787
25	0.256	OL Y	0.531		0.650		1.030			VI. 10. 1		10		
26			0 521	No.	0.856	•	1.058		1.315	1.70	6	2.056	2.479	2.779
26	0.256		0.531		0.855		1.057		1.314	1.70	3	2.052	2.473	2.771
27	0.256		0.531	962	0.855		1.056		1.313	1.70	1	2.048	2.467	2.763
28	0.256	NA	0.530		0.854		1.055	1-	1.311	1.69	9	2.045	2.462	2.756
29	0.256		0.530		0.854		1.055	Jan.	1.310	1.69	7	2.042	2.457	2.750
30	0.256	212	0.530	Al S				AT.		1.3	1.0	1.77	167	
.	0.266	2.5	0.529		0.851		1.050		1.303	1.68	4	2.021	2.423	2.704
40	0.255	ec #	0.527		0.848		1.045	4 11	1.296	1.67	1 100	2.000	2.390	2.660
60	0.254	90 8	0.526		0.845		1.041		1.289	1.65		1.980	2.358	2.617
20	0.254	-0.4	0.524	100	0.842	34	1.036		1.282	1.64	5	1.960	2.326	2.576

Note: The above table gives the values of t for one-tail test (either left-tail or right-tail test). If we have to find the value of t for a two-tail test at a level, we take the value of  $\alpha/2$  for  $\alpha$ . For example, the value of t at 5% level with 9 d.f. is  $t_{0.025} = 2.262$  and the value of t at 1% level with 11 d.f. is  $t_{0.005} = 3.106$ 

## Critical Values of the F-Distribution



			Valu	es of F <sub>0.05</sub>	$(v_1, v_2)$	•			
	1-1-60	1 42 10.4	21 F E	ν,	27.5				
2	the same of the sa	2	3	. <b>4</b> . c	<b>5</b>	6	7	8	9
1	161.4	199.5	215.7	224.6	230.2	234.0	236.8	238.9	240.5
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77
.5		TAA E		175 ( 199-	The second		Same Coll		
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02
		75	A Se Car The						251
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49
18	4.41	27.76	3.16	2.93	2.77	2.66	2.58	2.51	2.46
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39
21	4.32	3.47	3.07	2.84	2.68	2.52	2.40		
22	4.30	3.44	3.07	2.82	2.66	2.57	2.49	2.42	2.37
23	4.28	3.42	3.03	2.82	2.64	2.55 2.53	2.46	2.40	2.34
24	4.26	3.40	3.01	2.78	2.62	2.53		2.37	2.32
25	4.24	3.39	2.99	2.76	2.60	2.49	2.42	2.36	2.30
01.52	100		製造を			2.47	2.40	2.34	2.28
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	1.732	Print in
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	100	Mary St. Land.
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	State in	2.21
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	
- 60	4.00		2.76		2.37		2.23		1 2000
120	3.92	3.07	2.68	2.45	2.29	2.17	2.09	129.5	3 733
00	3.84	3.00	2.60	2.37	2.21	2.10	2.01	3823	1.96

## (Continued) Critical Values of the F-Distribution

	Values of $F_{0.05}(v_1, v_2)$												
						ν	·						
2	10	_	12	15	20		24	30	40	60	120		
1	241.9		243.9	245.9	248.0		249.1	250.1	251.1	• • • • • • • • • • • • • • • • • • • •			
2	19.40		19.41	19.43	19.45	99	19.45	19.46	251.1	252.2	253.3	254.3	
3	8.79	Ţ.	8.74	8.70	8.66		8.64	8.62	19.47	19.48	19.49	19.50	
4	5.96		5.91	5.86	5.80	1	5.77	5.75	8.59	8.57	8.55	8.52	
5	4.74	M.	4.68	4.62	4.56		4.53	4.50	5.72	5.69	5.66	5.62	
N. P.								4.50	4.46	4.43	4.40	4.36	
6	4.06		4.00	3.94	3.87		3.84	3.81					
7	3.64	ā.	3.57	3.51	3.44	p.	3.41	3.38	3.77	3.74	3.70	3.67	
8	3.35	100	3.28	3.22	3.15		3.12		3.34	3.30	3.27	3.23	
9	3.14	1	3.07	3.01	2.94		2.90	3.08	3.04	3.01	2.97	2.93	
0	2.98		2.91	2.85	2.77			2.86	2.83	2.79	2.75	2.71	
				2.03	2.11		2.74	2.70	2.66	2.62	2.58	2.54	
1 80	2.85	1	2.79	2.72	244		2.01						
2	2.75		2.69	2.62	2.65	4	2.61	2.57	2.73	2.49	2.45	2.40	
3	2.67	1	2.60	2.53	2.54		2.51	2.47	2.43	2.38	2.34	2.30	
4	2.60		2.53	2.46	2.46		2.42	2.38	2.34	2.30	2.25	2.21	
15	2.54		2.48	2.40	2.39		2.35	2.31	2.27	2.22	2.18	2.13	
- 3				2.40	2.33		2.29	2.25	2.20	2.16	2.11	2.07	
16	2.49		2.42	2.35	2.20								
17	2.45	5		2.31	2.28		2.24			2.11	2.06	2.01	
18	2.41	£	2.34	2.27	2.23		2.19	4 - 1 - 1 - 1 - 1 - 1		2.06	2.01	1.96	
19	2.38	1	2.31	2.23	2.16			2.11		2.02	1.97	1.92	
20	2.35	1	2.28	2.20	2.12			40.0	2.03	7.7	1.93	1.88	
14							2.08	2.04	1.99	1.95	1.90	1.84	
21	2.32	2	2.25	2.18	2.10		2.05	2.01	100				
22	2.30	8.	2.23	2.15	100			1.09	1.96	1.92	1.87	1.81	
23	2.27		2.20	2.13			2.01		1.94			1.78	
24	2.25	è	2.18	2.11			1,502		1.91 1.89	1.86	1.81	1.76	
25	2.24	j.	2.16	2.09		W. Do	1.96	1.92	1.87		1.79	1.73	
	40.00								1.07	1.82	1.77	1.71	
26	2.22	3	2.15	2.07	1.99		1.95	1.90	1.85	1 00			
27	2.20	£	2.13	2.06	1.97	5						1.69	
28	2.19	3	2.12	2.04	1.96			The state of the s	1.82	1.79	40	1.67	
29	2.18	3.	2.10	2.03	1.94				1.81	1.77	1.71	1.65	
30	2.16		2.09	2.01	1.93	8	1.89	1.84	1.79		1.70	1.64	
1											1.68	1.62	
40	2.08	5	2.00	1.92	1.84		1.79	1.74	1.69	1.64	1.58	1.61	
60	1.99	2	1.92	1.84	1.75		1.70	1.65	1.59		1.38	1.51	
20	1.91	2	1.83	1.75	1.66	ė.	1.61	1.55	1.50	1.43	1.35	1.39	
<b>∞</b>	1.83	2	1.75	1.67	1.57				§ 1.39		1.22	1.00	

## (Continued) Critical Values of the F-Distribution

			Va	lues of F	0.01	1, 2					
					ν,		,				
v. T	1 1	2	3	f. 4	i L	5	6	7 -	8	9	
2				***	57	64	5859	5928	5981	6022	
1	4052	4999.5	5403	5625	1	99.30	99.33	99.36	99.37	99.39	
2	98.50	99.00	99.17	99.25		28.24	27.91	27.67	27.49	27.35	
3	34.12	30.82	29.46	28.7		15.52	15.21	14.98	14.80	14.66	
4	21.20	18.00		15.9		10.97	10.67	10.46	10.29	10.16	
5	16.26	13.27	12.06	11.3	9	10.77				1	
					. R. W.	8.75	8.47	8.26	8.10	7.98	
6	13.75	10.92	9.78			7.46	7.19	6.99	6.84	6.72	
7.	12.25	9.55	8.45	7.8			6.37	6.18	6.03	5.91	72
8	11.26	8.65	7.59	7.0	2 4 4	6.63	5.80	5.61	5.47	5.35	2.5
9	10.56	8.02	6.99	6.4		6.06	5.39	5.20	5.06	4.94	
10	10.04	7.56	6.55	5.9	99	5.64	3.39	3.20	3.00	4.94	
							6.07	4.89	4.74	1.	, .
11-1	9.65	7.21	6.22	5.6	4 4	5.32	5.07			4.63	
12	9.33	6.93	5.95	5.4	41	5.06	4.82	4.64		4.39	
13 🔄	9.07	6.70	5.74	5.3	21	4.86	4.62	4.44	4.30	4.19	
14.4	8.86	6.51	5.56	5.0	04	4.69	4.46	4.28	4.14	4.0	
15	8.68	6.36	5.42	4.	89	4.56	4.32	4.14	4.00	3.8	9
	200										
16	8.53	6.23	5.29	4.	77	4.44	4.20	4.03	3.89	3.7	8
17	8.40	6.11	5.18	4.	67	4.34	4.10	3.93	3.79	3.6	8
18	8.29	6.01	5.09	4.	.58	4.25	4.01	3.84	3.71	3.6	0
19	8.18	5.93	\$0.5 5.01	4.	.50	4.17	3.94	3.77	3.63	3.5	12
20	8.10	5.85	4.94	4.	.43	4.10	3.87	3.70	3.56	3.4	16
21	8.02	5.78	4.8	1 (U.C. 4	.37	4.04	3.81	3.64	3.51	3.4	40
22	7.95	5.72	4.8	2 89 1 4	.31	3.99	3.76	3.59	3.45	3.:	35
23	7.88	5.66	4.7	5 4	.26	3.94	3.71	3.54	3.41	3.	30
24	7.82	5.61	4.7	2 4	.22	3.90	3.67	3.50		in sole.	26
25	7.77	5.57	4.6	8 4	.18	3.85	3.63	3.46	3.3		
26		5.53	4.6	4 19 40 4	1.14	3.82	3.59	3.42	3.2	9 3	.18
27	7.68	5.49	4.6	0 4	4.11	3.78	3.56				.15
28	7.64	5.45			4.07	3.75			59.	N 7	.12
29	7.60	5.42	18.1 4.5	East to	4.04	3.73				1.50	
30	7.56	5.39			4.02	3.70	14 C.X			47 1	.09
								3.30	3.1	3	3.07
40 :	7.31	5.18	88 1 4.3	1 FOR	3.83	3.51	2.00				1
60	7.08	4.98	1.4	1.5	3.65	3.34					2.89
120	6.85	4.79	3.0		3.48		A 2 11 11 11		7.5	-4.	2.72
	6.63	4.61	Same	4 11 114	144	3.17		- 1		66	2.56
$\infty$	0.03	4.01	3.	0 (333.3)	3.32	3.02	2.8	0 2.6	4 2.	51	2.41

## (Continued) Critical Values of the F-Distribution

statistical labida

Values of $F_{0.01}(v_1, v_2)$										
<b>—</b>	10				ν,					
+	10	12	15	20	24	30	40	60	120	
2.		106	6157	6209	6235	6261	(200			•
01	99.40 27.23	99.42	99.43	99.45	99.46	99.47	6287	6313	6339	6366
١		27.05	26.87	26.69	26.60	26.50	99.47	99.48	99.49	99.50
13	14.55	14.37	14.20	14.02	13.93	13.84	26.41	26.32	26.22	26.13
:3	10.05	9.89	9.72	9.55	9.47		13.75	13.65	13.56	13.46
Ť.	60 400 A	P. DEU SE	1841.81	- Brate	t An a r	9.38	9.29	9.20	9.11	9.02
	7.87	7.72	7.56	7.40	7.31	7 22				
	6.62	6.47	6.31	6.16	6.07	7.23	7.14	7.06	6.97	6.88
vič.	5.81	5.67	5.52	5.36	5.28	5.99	5.91	5.82	5.74	5.65
	5.26	5.11	4.96	4.81	4.73	5.20	5.12	5.03	4.95	4.86
	4.85	4.71	4.56	4.41	4.33	4.65	4.57	4.48	4.40	4.31
81	16-14-41	1 - 29	The second second	Committee of the second	7.33	4.25	4.17	4.08	4.00	3.91
* 1.5	4.54	4.40	4.25	4.10	4.02	16 4a5 15	ALS THE BY	State of the	of the	
2	4.30	4.16	4.01	3.86	3.78	3.94	3.86	3.78	3.69	3.60
3	4.10	3.96	3.82	3.66	3.59	3.70	3.62	3.54	3.45	3.36
1	3.94	3.80	3.66		3.43	3.51	3.43	3.34	3.25	3.17
5	3.80	3.67	3.52	3.37	3.43	3.35	3.27	3.18	3.09	3.00
.,	- A-9	e i igi B-tikis e	L TRUES	32.0	3.29	3.21	3.13	3.05	2.96	2.87
6	3.69	3.55	3.41	3.26	3.18	210	287625	27.99		1 05
7	3.59	3.46	3.31		3.08	3.10 3.00	3.02	2.93	2.84	2.75
8	3.51	3.37	3.23	_	3.00	2.92	2.92	2.83	2.75	2.65
9	3.43	0.00	0.10	3.00	2.92	2.84	2.84	2.75	2.66	2.57
0	3.37	3.23	3.09	2.04	2.86	2.78		2.67	2	2.49
	18 858.0	W - P.13. P	e 6-1.13	BAB 54	18.0.1E	46-56-46	2.09	2.61	2.52	2.42
1	3.31	3.17	3.03	2.88	2.80	2.72	2.64	2 56	246	1
2	3.26	3.12	2.98	2.83			1.5	2.50	2.46	2.36
3	3.21	3.07	2.93	2.78	2.70	2.62			2.35	
4	48 3.17 E.S			2.74	2.66					
.5	3.13	2.99	2.85	2.70	2.62	2.54	2.45	2.36		2.21
6	3.09	2.96	2.81	2.66	2.58	2.50	2.42			and the same of th
27	3.06	2.93	2.78	2.63	2.55	2.47	2.42	2.33	2.23	2.13
28	3.03	2.90	2.75	2.60	2.52	2.44	2.35	2.29	2.20	2.10
29	3.00	2.87	2.73	2.57	2.49	2.41	2.33	2.23	2.17	2.06
30	2.98	2.84	2.70	2.55	2.47	2.39	2.30	2.21	2.14	2.03
									4.11	2.01
40	2.80	2.66	2.52	2.37	2.29	2.20	2.11	2.02	1.92	1.80
60	2.63	2.50	2.35	2.20	2.12	2.03	1.94	1.84	1.73	1.60
20	2.47	2.34	2.19	2.03	1.95	1.86	1.76	1.66	1.53	1.38
$\infty$	2.32	2.18	2.04	1.88	1.79	1.70	1.59	1.47	1.32	1.00

Table - 6

 $\chi_{\alpha}^2$  - Critical Values of the Chi-squared Distribution with  $\nu$  Degrees of Freedom

V	0.30	0.25	0.20	0.10	0.05	0.025	0.02	0.01	0.005	0.001
_	1.074	1 222	1 / / 2	2.704	3.841	5.024	5.412	6.635	7.879	10.827
:	1.074	1.323 08	1.642	2.706	5.991	7.378	7.824	9.210	10.597	13.815
2	2.408	2.773	3.219	4.605	7.815	9.348	9.837	11.345	12.838	16.268
3	3.665	4.108	4.642	6.251		11.143	11.668	13.277	14.860	18.465
:	4.878	5.385	5.989	7.779	9.488	12.832	13.388	15.086	16.750	20.517
5	6.064	6.626	7.289	9.236	11.070	12.004				
2	2 221 51	7 041 630		10.646	12.592	14.449	15.033	16.812	18.548	22.457
6	7.231	7.841	8.558	10.645	14.067	16.013	16.622	18.475	20.278	24.322
8	8.383	9.037	9.803	12.017	15.507	17.535	18.168	20.090	21.955	26.125
9	9.524	10.219	11.030	13.362	16.919	19.023	19.679	21.666	23.589	27.877
10	10.656	11.389	12.242	14.684	18.307	20.483	21.161	23.209	25.188	29.588
.	11.701	12.549	13.442	15.987	10.507				9.3	
11	12.899	13.701	14 621	17.275	19.675	21.920	22.618	24.725	26.757	31.264
12	14.011	14.845	14.631 15.812	18.549	21.026	23.337	24.054	26.217	28.300	32.909
13	15.119	15.984	16.985	19.812	22.362	24.736	25.472	27.688	29.819	34.528
14	16.222	17.117	18.151	21.064	23.685	26.119	26.873	29.141	31.319	36.123
15	17.322	18.245	19.311	22.307	24.996	27.488	28.259	30.578	32.801	37.697
	A 1 45	19.245	e Paris	D 22.00		49 )	100	Section 1981	. 35.	
16	18.418	19.369	20.465	23.542	26.296	28.845	29.633	32.000	34.267	39.252
17	19.511	20.489	21.615	24.769	27.587	30.191	30.995	33.409	35.718	40.790
18	20.601	21.605	22.760	25.989	28.869	31.526	32.346	34.805	37.156	42.312
19	21.689	22.718	23.900	27.204	30.144	32.852	33.687	36.191	38.582	43.820
20	22.775	23.828	25.038	28.412	31.410	34.170	35.020	37.566	39.997	45.315
JEST .	577.5	18.83	To such	<b>第二日本語</b>	# #1.6					€.
21	23.858	24.935	26.171	29.615	32.671	35.479	36.343	38.932	41.401	46.797
22	24.939	26.039	27.301	30.813	33.924	36.781	37.659	40.289	42.796	48.268
23	26.018	27.141	28.429	32.007	35.172	38.076	38.968	41.638	44.181	49.728
24	27.096	28.241	29.553	33.196	36.415	39.364	40.270	42.980	45.558	51.179
25	28.172	29.339	30.675	34.382	37.652	40.646	41.566	44.314	46.928	52.620
26	29.246	30.434	31.795	35.563	38.885	41.923	42.856	45.642	48.290	54.052
27	30.319	31.528	32.912	36.741	40.113	43.194	44.140	46.963	49.645	55.476
28	31.391	32.620	34.027	37.916	41.337	44.461	45.419	48.278	50.993	56.893
29	32.461	33.711	35.139	39.087	42.557	45.772	46.693	49.588	52.336	58.302
30	33.530	34.800	36.250	40.256	43.773	46.979	47.962	50.892	53.672	59.703

| 18 | 189 | 299 | 281 | 186 | 238 | 239 | 232 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 | 233 |

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