DISTRIBUCION F DE SNEDECOR

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Función de densidad:

$$f(x) = \frac{\Gamma\left(\frac{n+d}{2}\right)}{\Gamma\left(\frac{n}{2}\right) \cdot \Gamma\left(\frac{d}{2}\right)} \cdot \left(n/d\right)^{n/2} \cdot \frac{x^{n/2-1}}{\left(1 + \frac{n}{d}x\right)^{\frac{n+d}{2}}} \qquad si \quad x > 0$$

Espacio paramétrico: grados de libertad del numerador n y grados de libertad del denominador d ambos enteros positivos.

Valor esperado: $\frac{d}{d-2}$ para d > 2

Varianza: $\frac{2d^2(n+d-2)}{n(d-2)^2(d-4)}$ para d > 4

Función generadora de momentos: no existe

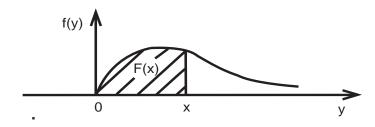


TABLA DE DISTRIBUCION F DE SNEDECOR

La tabla entrega valores de la cuantila z para valores dados de probabilidad acumulada $F(x) = \int_0^x f(y) dy$.

Los valores de probabilidad acumulada son: 0.005; 0.010; 0.025; 0.050; 0.100; 0.750; 0.800; 0.850; 0.900; 0.950; 0.980; 0.990; 0.995.

Los valores de los grados de libertad del numerador son: De 1 a 20; de 25 a 40 variando en 5; de 50 a 100 variando en 10; 120; 150.

Los valores de los grados de libertad del denominador son: De 1 a 30; de 35 a 100 variando en 5; 110; 120; 150; 200; 500.

INVERSION DE LA F DE SNEDECOR

Se puede usar la siguiente relación para calcular valores que no aparecen en la tabla: Si la variable aleatoria X tiene distribución \mathbf{F} con n grados de libertad del numerador y d grados de libertad del denominador, entonces 1/X tiene distribución \mathbf{F} , con d grados de libertad del numerador y n grados de libertad del denominador.

Por lo tanto se pueden obtener más valores de los que aparecen en la tabla, mediante en la relación $F_{n,d}(x) = 1 - F_{d,n}(\frac{1}{x})$ en que F es el valor de probabilidad acumulada de la tabla, el primer subíndice corresponde a los grados de libertad del numerador, el segundo a los grados de libertad del denominador.

TABLA DE DISTRIBUCION F DE SNEDECOR

GRADOS DE LIBERTAD numerador $\rightarrow 1$

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.000	0.000	0.002	0.006	0.025	5.828	9.472	17.35	39.86	161.4	647.8	1013	4052
2	0.000			0.005							38.50	48.50	98.49
3				0.005									
4				0.004							12.22		
5				0.004								11.32	
6				0.004			2.073		3.776	5.987	8.813	9.876	13.75
7				0.004						5.591			12.25
8	0.000	0.000		0.004					3.458	5.318	7.571	8.389	11.26
9	0.000	0.000		0.004					3.360	5.117	7.209	7.961	10.56
10		0.000		0.004						4.965	6.937	7.638	10.04
11 12		0.000		0.004			1.859		3.225		6.724 6.554	7.388	9.646
13		0.000 0.000		0.004 0.004			1.839 1.823					7.188	9.330
14		0.000		0.004			1.809			4.667 4.600	6.298	7.024 6.888	8.862
15				0.004			1.797				6.200		8.683
16		0.000		0.004			1.787				6.115		
17		0.000		0.004			1.778		3.026		6.042		8.400
18		0.000		0.004							5.978		
19		0.000		0.004					2.990			6.449	
20		0.000		0.004								6.391	
21	0.000	0.000	0.001	0.004	0.016	1.400	1.751	2.233	2.961	4.325	5.827		
22	0.000			0.004					2.949	4.301	5.786	6.292	7.945
23	0.000	0.000	0.001	0.004	0.016	1.393	1.741	2.218	2.937	4.279	5.750	6.249	7.881
24	0.000	0.000	0.001	0.004	0.016	1.390	1.737	2.212	2.927	4.260	5.717	6.211	7.823
25	0.000	0.000	0.001	0.004	0.016	1.387	1.733	2.206	2.918	4.242	5.686	6.176	7.770
26	0.000	0.000	0.001	0.004	0.016	1.384	1.729	2.200	2.909	4.225	5.659	6.144	7.721
27	0.000	0.000	0.001	0.004	0.016	1.382	1.726	2.195	2.901	4.210	5.633	6.114	7.677
28	0.000	0.000	0.001	0.004	0.016	1.380	1.723	2.191	2.894	4.196	5.610	6.087	7.636
29	0.000	0.000		0.004							5.588	6.062	7.598
30		0.000		0.004			1.717				5.568	6.038	7.562
35		0.000		0.004						4.121	5.485		7.419
40				0.004							5.424		7.314
45		0.000		0.004			1.692		2.820	4.057	5.377	5.818	7.234
50		0.000		0.004		1.355	1.687			4.034	5.340	5.776	7.171
55 60		0.000		0.004 0.004			1.679				5.310 5.286	5.741	7.119
65	0.000	0.000 0.000		0.004							5.265	5.689	7.077
70				0.004									7.042
75				0.004									
80				0.004									
85				0.004									
90				0.004									
95				0.004									
100				0.004									
200				0.004									
500				0.004									
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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.005	0.010	0.026	0.054	0.117	7.500	12.00	21.72	49.50	199.5	799.5	1250	5000
2	0.005	0.010	0.026		0.111		4.000	5.667	9.000	19.00	39.00	49.00	98.98
3 4	0.005	0.010 0.010	0.026		0.109		2.886	3.813	5.462 4.325	9.552	16.04 10.65	18.86 12.14	30.82
5	0.005 0.005	0.010	0.025 0.025		0.108 0.108		2.472	2.840	3.780			9.454	18.00 13.27
6	0.005	0.010	0.025	0.052	0.103		2.130	2.646	3.463	5.143	7.260	8.052	10.92
7	0.005		0.025		0.107		2.043		3.257	4.737	6.542	7.203	
8	0.005	0.010	0.025		0.107	1.657		2.427	3.113	4.459	6.059	6.637	8.649
9	0.005	0.010	0.025	0.052	0.107	1.624	1.935	2.360	3.006	4.256	5.715	6.234	8.022
10	0.005	0.010	0.025	0.052	0.106	1.598	1.899	2.307	2.924	4.103	5.456	5.934	7.559
11	0.005	0.010	0.025	0.052	0.106	1.577	1.870	2.265	2.860	3.982	5.256	5.701	7.206
12	0.005	0.010	0.025	0.052	0.106	1.560	1.846	2.231	2.807	3.885	5.096	5.516	6.927
13	0.005	0.010	0.025		0.106			2.203	2.763	3.806	4.965	5.366	6.701
14	0.005	0.010	0.025	0.051	0.106	1.533	1.809	2.179	2.726	3.739	4.857	5.241	6.515
15	0.005	0.010	0.025	0.051	0.106		1.795	2.159	2.695	3.682	4.765	5.135	6.359
16 17	0.005 0.005	0.010 0.010	0.025 0.025	0.051 0.051	0.106 0.106		1.783	2.141	2.645	3.634 3.592	4.687 4.619	5.046 4.968	6.226 6.112
18	0.005	0.010	0.025		0.106	1.499		2.112		3.555	4.560	4.900	6.013
19	0.005	0.010	0.025	0.051	0.106	1.493	1.754		2.606	3.522	4.508	4.840	5.926
20	0.005	0.010	0.025	0.051	0.106	1.487	1.746	2.089	2.589	3.493	4.461	4.788	5.849
21	0.005	0.010	0.025	0.051	0.106	1.482	1.739	2.079	2.575	3.467	4.420	4.740	5.780
22	0.005	0.010	0.025	0.051	0.106	1.477	1.733	2.071	2.561	3.443	4.383	4.698	5.719
23	0.005	0.010	0.025	0.051	0.106	1.473	1.728	2.063	2.549	3.422	4.349	4.660	5.664
24	0.005	0.010	0.025	0.051	0.106	1.470		2.055	2.538	3.403	4.319	4.625	5.614
25	0.005	0.010	0.025				1.718		2.528	3.385	4.291	4.593	5.568
26	0.005		0.025				1.713		2.519	3.369		4.564	
27 28	0.005	0.010 0.010	0.025		0.106	1.460	1.709	2.037	2.511 2.503	3.354		4.538	5.488
29	0.005 0.005	0.010	0.025 0.025	0.051 0.051	0.106 0.106	1.457 1.455	1.706	2.032 2.027		3.340 3.328	4.221 4.201	4.513 4.491	5.453 5.420
30	0.005	0.010	0.025	0.051	0.106	1.452		2.027		3.316	4.182	4.470	5.390
35	0.005	0.010	0.025	0.051	0.106			2.004		3.267	4.106		5.268
40	0.005	0.010	0.025	0.051	0.106	1.435	1.676	1.990	2.440	3.232	4.051	4.321	5.179
45	0.005	0.010	0.025	0.051	0.106	1.430	1.668	1.979	2.425	3.204	4.009	4.273	5.110
50	0.005	0.010	0.025	0.051	0.106	1.425	1.662	1.971	2.412	3.183	3.975	4.235	5.057
55	0.005	0.010	0.025	0.051	0.106	1.422	1.657	1.964	2.402	3.165	3.948	4.204	5.013
60	0.005	0.010	0.025		0.106	1.419	1.653	1.958	2.393	3.150	3.925	4.179	
65	0.005	0.010	0.025		0.106		1.650	1.954		3.138	3.906	4.157	4.947
70 75					0.106							4.139	
75 80					0.106 0.106								
85					0.105								
90					0.105								
95					0.105								
100					0.105								
200	0.005	0.010	0.025	0.051	0.105	1.396	1.622	1.915	2.329	3.041	3.758	3.990	4.713
500	0.005	0.010	0.025	0.051	0.105	1.390	1.615	1.904	2.313	3.014	3.716	3.943	4.648

DISTRIBUCION F DE SNEDECOR (3)

GRADOS DE LIBERTAD numerador $\rightarrow 3$

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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.018	0.029	0.057	0.099	0.181	8.200	13.06	23.57	53.59	215.7	864.2	1351	5403
2	0.020	0.032	0.062	0.105	0.183	3.153	4.156	5.826	9.162	19.16	39.16	49.16	99.15
3	0.021	0.034	0.065	0.108	0.186	2.356	2.936	3.821	5.391	9.277	15.44	18.11	29.46
4	0.022	0.035	0.066	0.110	0.187	2.047	2.485	3.124	4.191	6.591	9.979	11.34	16.69
5	0.022	0.035	0.067	0.111	0.188	1.884	2.253	2.776	3.619	5.409	7.764	8.670	12.06
6	0.022	0.036	0.068	0.112	0.189	1.784	2.113	2.570	3.289	4.757	6.599	7.287	9.780
7	0.023	0.036									5.890		
8		0.036									5.416		
9	0.023	0.037									5.078		
10		0.037									4.826		
11											4.630		
12											4.474		
13											4.347		
14											4.242		
15	0.023	0.037									4.153		
16					0.192							4.361	
17											4.011		
18											3.954		
19											3.903		
20											3.859		
21											3.819		
22											3.783		
23					0.193		1.676					3.991	
24	0.023				0.193			1.941			3.721	3.958	
$\frac{25}{26}$					0.193						3.694	3.900	
27											3.647		
28											3.626		4.568
29											3.607		
30					0.193							3.809	
35					0.194							3.727	
40											3.463		
45		0.038			0.194							3.622	
50		0.038			0.194						3.390	3.585	4.199
55											3.364		
60											3.343		
65											3.324		
70											3.309		
75	0.024	0.038	0.072	0.117	0.194	1.398	1.585	1.824	2.158	2.727	3.296	3.480	4.054
80											3.284		
85											3.274		
90											3.265		
95	0.024	0.038	0.072	0.117	0.194	1.392	1.577	1.813	2.142	2.700	3.257	3.436	3.995
100	0.024	0.038	0.072	0.117	0.194	1.391	1.576	1.811	2.139	2.696	3.250	3.428	3.984
200	0.024	0.038	0.072	0.117	0.195	1.380	1.561	1.792	2.111	2.650	3.182	3.353	3.881
500	0.024	0.038	0.072	0.117	0.195	1.374	1.553	1.780	2.095	2.623	3.142	3.308	3.821
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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.032	0.047	0.082	0.130	0.220	8.581	13.64	24.58	55.83	224.6	899.6	1406	5625
2	0.038	0.056	0.094		0.231	3.232	4.236	5.906	9.243	19.25	39.25	49.24	99.23
3 4	0.041	0.060 0.063	0.100	0.152 0.157	0.239		2.956 2.483	3.817	5.343 4.107	9.117	15.10 9.605	17.69 10.90	28.71 15.98
5	0.045	0.064	0.104 0.107		0.245 0.247			2.731		5.192	7.388	8.233	11.39
6	0.046	0.066	0.107		0.249		2.092		3.181	4.534	6.227	6.859	9.148
7	0.046	0.067		0.164			1.994		2.961	4.120	5.523	6.035	7.847
8	0.047	0.068	0.111	0.166	0.253	1.664	1.923	2.274	2.806	3.838	5.053	5.489	7.006
9	0.047	0.068	0.112	0.167	0.254	1.625	1.870	2.199	2.693	3.633	4.718	5.103	6.422
10	0.048	0.069	0.113	0.168	0.255	1.595	1.829	2.141	2.605	3.478	4.468	4.816	5.994
11	0.048	0.069	0.114	0.168	0.256	1.570	1.796	2.095	2.536	3.357	4.275	4.594	5.668
12	0.048	0.070	0.114	0.169	0.257	1.550	1.768	2.057	2.480	3.259	4.121	4.419	5.412
13	0.049	0.070	0.115	0.170	0.257			2.025	2.434	3.179	3.996	4.276	5.205
14	0.049	0.070	0.115	0.170	0.258		1.727	1.999	2.395	3.112	3.892	4.158	5.035
15	0.049	0.070	0.116	0.171	0.258	1.507	1.710	1.976	2.361	3.056	3.804	4.058	4.893
16 17	0.049	0.071 0.071	0.116 0.116	0.171 0.171	0.259 0.259	1.497 1.487	1.696 1.684	1.957 1.940	2.333 2.308	3.007 2.965	3.729 3.665	3.974 3.901	4.773 4.669
18	0.049	0.071		0.171		1.479	1.673	1.925	2.286	2.928	3.608	3.837	4.579
19	0.049	0.071	0.117		0.260	1.472	1.663	1.911	2.266	2.895	3.559	3.781	4.500
20	0.050	0.071	0.117	0.172	0.260	1.465	1.654	1.899	2.249	2.866	3.515	3.731	4.431
21	0.050	0.071	0.117	0.173	0.260	1.459	1.646	1.888	2.233	2.840	3.475	3.687	4.369
22	0.050	0.072	0.117	0.173	0.261	1.454	1.639	1.879	2.219	2.817	3.440	3.647	4.313
23	0.050	0.072	0.117	0.173	0.261	1.449	1.633	1.870	2.207	2.796	3.408	3.611	4.264
24	0.050	0.072	0.117	0.173	0.261	1.445	1.627	1.862		2.776	3.379	3.579	4.218
25	0.050	0.072	0.118			1.441		1.854			3.353	3.549	4.177
26	0.050	0.072		0.174		1.437		1.848			3.329		4.140
27	0.050	0.072	0.118	0.174		1.433	1.612	1.841		2.728	3.307	3.498	4.106
$\frac{28}{29}$	0.050 0.050	0.072 0.072	0.118 0.118		0.262 0.262	1.430 1.427	1.608 1.604	1.836 1.830	2.157 2.149	2.714 2.701	3.286 3.267	3.475 3.453	4.074 4.045
30	0.050	0.072	0.118		0.262		1.600	1.825	2.143	2.690	3.250	3.434	4.018
35	0.050	0.073	0.119	0.175	0.262	1.413		1.805		2.641	3.179	3.354	3.908
40	0.051	0.073	0.119	0.175	0.263			1.789				3.295	3.828
45	0.051	0.073	0.119	0.175	0.263	1.398	1.565	1.778	2.074	2.579	3.086	3.251	3.767
50	0.051	0.073	0.119	0.175	0.263	1.393	1.558	1.768	2.061	2.557	3.054	3.215	3.720
55	0.051	0.073	0.119	0.176	0.264	1.388	1.552	1.761	2.050	2.540	3.029	3.187	3.681
60	0.051	0.073	0.120		0.264	1.385	1.548	1.754		2.525	3.008	3.163	3.649
65	0.051	0.073	0.120			1.382		1.749		2.513	2.990	3.144	3.622
70		0.073			0.264								
75 80					0.264 0.264								
80 85					0.264								
90					0.264 0.265								
95					0.265								
100					0.265								
200	0.052	0.074	0.121	0.177	0.265	1.358	1.512	1.706	1.973	2.417	2.850	2.988	3.414
500	0.052	0.074	0.121	0.177	0.266	1.351	1.503	1.694	1.956	2.390	2.811	2.945	3.357

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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.044	0.062	0.100	0.151	0.246	8.820	14.01		57.24	230.2	921.8	1441	5764
2		0.075	0.119		0.265	3.280		5.955			39.30	49.29	99.28
3		0.083	0.129		0.276	2.409			5.309		14.88	17.43	28.24
4		0.088	0.135		0.284		2.478	3.068		6.256	9.364 7.146	10.62 7.953	15.52
5 6	0.067	0.091	0.140	0.198	0.290 0.294				3.108	5.050 4.387	5.988	6.585	10.97 8.746
7		0.094		0.202			1.974			3.972	5.285	5.765	7.460
8				0.208			1.900		2.726	3.687	4.817	5.223	6.632
9	0.073	0.098	0.150	0.210	0.302	1.617	1.846	2.152	2.611	3.482	4.484	4.840	6.057
10	0.073	0.099	0.151	0.211	0.303	1.585	1.803	2.092	2.522	3.326	4.236	4.555	5.636
11	0.074	0.100	0.152	0.213	0.305	1.560	1.768	2.045	2.451	3.204	4.044	4.336	5.316
12	0.075	0.101	0.153	0.214	0.306	1.539	1.740	2.006	2.394	3.106	3.891	4.162	5.064
13	0.075	0.102	0.154	0.215	0.307	1.521	1.717	1.973	2.347	3.025	3.767	4.020	4.862
14	0.076	0.102			0.308	1.507	1.697		2.307	2.958	3.663		4.695
15		0.103			0.309	1.494	1.680	1.923	2.273	2.901	3.576	3.805	4.556
16		0.103		0.217		1.483	1.665		2.244		3.502	3.721	4.437
17		0.104			0.310					2.810	3.438	3.649	4.336
18 19		0.104 0.104		0.218	0.311	1.464 1.457	1.641 1.631			2.740	3.382	3.586 3.531	4.248 4.171
20	0.077 0.077	0.104 0.105	0.158	0.219	0.311	1.450	1.622	1.856 1.843	2.170	2.740	3.333 3.289	3.482	4.171
21		0.105	0.158		0.312		1.614				3.250	3.438	4.042
22		0.105	0.159		0.313			1.822			3.215	3.399	3.988
23	0.078	0.105	0.159		0.313			1.813			3.183	3.363	3.939
24	0.078	0.106	0.159	0.221	0.313	1.428	1.593	1.805	2.103	2.621	3.155	3.331	3.895
25	0.078	0.106	0.160	0.221	0.314	1.424	1.588	1.797	2.092	2.603	3.129	3.302	3.855
26	0.079	0.106	0.160	0.221	0.314	1.420	1.583	1.790	2.082	2.587	3.105	3.275	3.818
27	0.079	0.106	0.160	0.222	0.314	1.417	1.578	1.784	2.073	2.572	3.083	3.251	3.785
28	0.079	0.106	0.160		0.315	1.413	1.573	1.778	2.064		3.063	3.228	3.754
29	0.079	0.106	0.160		0.315	1.410	1.569	1.772	2.057	2.545	3.044	3.207	3.725
30	0.079	0.107	0.161		0.315	1.407	1.565		2.049	2.534	3.026	3.188	3.699
$\frac{35}{40}$		0.107 0.108	0.161 0.162		0.316 0.317	1.395 1.386	1.550 1.538		2.019 1.997		2.956 2.904	3.109 3.051	3.592 3.514
45		0.108	0.162	0.224 0.225		1.379	1.529	1.718		2.449	2.864	3.007	3.454
50	0.080	0.108	0.163	0.225	0.318	1.374	1.522	1.708	1.966	2.400	2.833	2.972	3.408
55		0.108		0.225		1.369	1.516	1.700	1.955		2.807		3.370
60	0.081	0.109	0.163	0.226	0.318	1.366	1.511	1.694	1.946	2.368	2.786	2.921	3.339
65	0.081	0.109	0.164	0.226	0.319	1.363	1.507	1.688	1.938	2.356	2.769	2.901	3.313
70	0.081	0.109	0.164	0.226	0.319	1.360	1.503	1.683	1.931	2.346	2.754	2.885	3.291
75	0.081	0.109	0.164	0.226	0.319	1.357	1.500	1.679	1.926	2.337	2.741	2.870	3.272
80	0.081	0.109	0.164	0.227	0.319	1.355	1.497	1.676	1.921	2.329	2.730	2.858	3.255
85				0.227									
90				0.227									
95				0.227									
100				0.227									
200 500				0.228 0.229									
500	0.062	0.111	0.100	0.449	0.322	1.550	1.404	1.001	1.009	4.434	4.092	2.700	5.004

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.054	0.073	0.113	0.167	0.265	8.983	14.26	25.65	58.20	234.0	937.1	1464	5859
2	0.069	0.092	0.138		0.289		4.317	5.988	9.325	19.33	39.33	49.33	99.32
3	0.077		0.152		0.304		2.971	3.806	5.285	8.941	14.73	17.25	27.91
4	0.083		0.161		0.314		2.473	3.050	4.010		9.197		15.21
5 6	0.087 0.090	0.114	0.167 0.172	0.228 0.233	0.322 0.327			2.073	3.405 3.055	4.950 4.284	6.978 5.820	7.758 6.393	10.67 8.466
7		0.110	0.172	0.238	0.332		1.957		2.827	3.866	5.119	5.576	7.191
8	0.095	0.123	0.179		0.335	1.651	1.883	2.195	2.668	3.581	4.652	5.036	6.371
9	0.096	0.125	0.181	0.244	0.338	1.609	1.826	2.117	2.551	3.374	4.320	4.654	5.802
10	0.098	0.127	0.183	0.246	0.340	1.576	1.782	2.056	2.461	3.217	4.072	4.371	5.386
11	0.099	0.128	0.185	0.248	0.343	1.550	1.747	2.007	2.389	3.095	3.881	4.153	5.069
12	0.100	0.130	0.186	0.250	0.344	1.529	1.718	1.967	2.331	2.996	3.728	3.980	4.821
13	0.101	0.131	0.188	0.251	0.346	1.511	1.694	1.934	2.283	2.915	3.604	3.840	4.620
14		0.131	0.189	0.253	0.347	1.495		1.906		2.848	3.501	3.724	4.456
15		0.132	0.190	0.254	0.348	1.482	1.656		2.208	2.790	3.415	3.626	4.318
16		0.133	0.191	0.255	0.349	1.471	1.641	1.862		2.741 2.699	3.341	3.543	4.202
17 18			0.192 0.192		0.350 0.351	1.460 1.452	1.628 1.616	1.844 1.828		2.661	3.277 3.221	3.471 3.408	4.102 4.015
19		0.134	0.192	0.257	0.351 0.352	1.444	1.605		2.109	2.628	3.172	3.353	3.939
20		0.135	0.193	0.258	0.353	1.437	1.596	1.801		2.599	3.128	3.304	3.871
21	0.105	0.136	0.194	0.259	0.353	1.430	1.588	1.790	2.075	2.573	3.090	3.261	
22	0.105	0.136	0.195	0.259	0.354	1.424	1.580	1.779	2.060	2.549	3.055	3.222	3.758
23	0.105	0.136	0.195	0.260	0.354	1.419	1.573	1.770	2.047	2.528	3.023	3.187	3.710
24	0.106	0.137	0.195	0.260	0.355	1.414	1.567	1.761	2.035	2.508	2.995	3.155	3.667
25	0.106	0.137	0.196	0.261	0.355	1.410	1.561	1.754	2.024	2.490	2.969	3.126	3.627
26	0.106	0.137	0.196		0.356		1.556	1.746			2.945	3.099	3.591
27	0.106	0.138	0.197		0.356	1.402	1.551	1.740	2.005	2.459	2.923	3.075	3.558
28	0.106	0.138	0.197	0.262	0.356	1.399	1.546		1.996	2.445	2.903	3.052	
29 30	0.107 0.107	0.138 0.138	0.197 0.197	0.262 0.263	0.357 0.357	1.395 1.392	1.542 1.538	1.728 1.723	1.988 1.980	2.432 2.421	2.884 2.867	3.032 3.012	
35	0.107	0.139	0.197	0.264	0.357		1.521	1.723		2.421 2.372			3.368
40	0.108	0.140	0.200	0.265	0.360	1.371	1.509				2.744		3.291
45	0.109	0.141	0.200	0.266	0.360	1.363	1.500	1.672	1.909	2.308	2.705	2.833	3.232
50	0.109	0.141	0.201	0.266	0.361	1.358	1.492	1.662	1.895	2.286	2.674	2.798	3.186
55	0.109	0.141	0.201	0.267	0.362	1.353	1.486	1.654	1.884	2.269	2.648	2.770	3.149
60	0.110	0.142	0.202	0.267	0.362	1.349	1.481	1.647	1.875	2.254	2.627	2.747	3.119
65	0.110	0.142	0.202	0.268	0.362	1.346	1.477	1.641	1.867	2.242	2.610	2.728	3.093
70								1.637					
75								1.632					
80								1.629					
85 90								1.625 1.623					
90 95								1.623					
100								1.618					
200								1.596					
500								1.583					
	•												

DISTRIBUCION F DE SNEDECOR (7)

GRADOS DE LIBERTAD numerador $\rightarrow 7$

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.062	0.082	0.124	0.179	0.279	9.102	14.44	25.97	58.91	236.8	948.2	1482	5928
2	0.081	0.105	0.153	0.211	0.307	3.335	4.340	6.011	9.349	19.35	39.35	49.35	99.34
3				0.230					5.266			17.11	27.67
4	0.099	0.127	0.181	0.243	0.338	2.079	2.469	3.036	3.979	6.094	9.074	10.27	14.98
5				0.252							6.853	7.614	10.46
6				0.259			2.051			4.207	5.695	6.251	
7				0.264							4.995		6.993
8				0.268			1.868			3.500	4.529		6.178
9		0.149		0.272			1.811		2.505	3.293		4.517	
10			0.210				1.766				3.950	4.235	5.200
11				0.278			1.730					4.017	
12				0.280			1.700					3.845	4.640
13		0.156		0.282		1.501		1.904			3.483	3.705	4.441
14				0.283		1.485				2.764		3.589	4.278
15			0.219		0.380			1.851			3.293	3.492	4.142
16				0.286		1.460		1.830		2.657	3.219	3.409	4.026
17		0.160	0.221	0.287		1.450		1.811		2.614	3.156	3.337	3.927
18	0.128		0.222				1.596					3.275	3.841
19			0.223								3.051		
20 21				0.290		1.425					3.007 2.969		
22		0.164		0.291							2.934		3.640 3.587
23				0.292			1.552				2.902		
24				0.293			1.545		1.983			3.022	
25				0.294			1.539		1.971		2.848		
26		0.165			0.389		1.534		1.961			2.967	3.421
27		0.166	0.228	0.295	0.390	1.390		1.705		2.373	2.802		3.388
28		0.166		0.295	0.390	1.386	1.524				2.782		3.358
29				0.296			1.519				2.763		3.330
30	0.133	0.167	0.229	0.296	0.391	1.380	1.515	1.688	1.927	2.334	2.746	2.880	3.304
35	0.134	0.168	0.231	0.298	0.393	1.367	1.499	1.665	1.896	2.285	2.676	2.802	3.200
40	0.135	0.169	0.232	0.299	0.394	1.357	1.486	1.649	1.873	2.249	2.624	2.745	3.124
45	0.135	0.170	0.233	0.300	0.396	1.350	1.476	1.636	1.855	2.221	2.584	2.701	3.066
50	0.136	0.171	0.234	0.301	0.396	1.344	1.469	1.625	1.840	2.199	2.553	2.667	3.020
55	0.136	0.171	0.235	0.302	0.397	1.339	1.462	1.617	1.829	2.181	2.528	2.639	2.983
60	0.137	0.172	0.235	0.303	0.398	1.335	1.457	1.610	1.819	2.167	2.507	2.616	2.953
65	0.137	0.172	0.236	0.303	0.398	1.331	1.453	1.604	1.811	2.154	2.489	2.596	2.928
70	0.137	0.172	0.236	0.304	0.399	1.329	1.449	1.599	1.804	2.143	2.474	2.580	2.906
75	0.138	0.173	0.236	0.304	0.399	1.326	1.446	1.595	1.798	2.134	2.461	2.566	2.887
80	0.138	0.173	0.237	0.304	0.399	1.324	1.443	1.591	1.793	2.126	2.450	2.553	2.871
85	0.138	0.173	0.237	0.305	0.400	1.322	1.440	1.588	1.789	2.119	2.440	2.542	2.857
90				0.305									
95				0.305									
100				0.305									
200				0.307									
500	0.141	0.176	0.241	0.309	0.404	1.296	1.407	1.544	1.729	2.028	2.313	2.402	2.675

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.068	0.089	0.132	0.188	0.289	9.192	14.58	26.21	59.44	238.9	956.7	1495	5981
2	0.091	0.116			0.321		4.358	6.029		19.37	39.37	49.37	99.36
3		0.132			0.342			3.798	5.252		14.54		27.49
4				0.261 0.271	0.356					6.041			14.80
5 6	0.120	0.151 0.157	0.208	0.271 0.279	0.307		2.202 2.042		3.339 2.983	4.010	6.757 5.600	7.503 6.141	10.29 8.102
7		0.162		0.213				2.257				5.327	
8		0.166		0.291				2.149		3.438	4.433		6.029
9	0.136	0.169	0.230	0.295	0.390				2.469	3.230	4.102	4.410	5.467
10	0.139	0.172	0.233	0.299	0.394	1.562	1.752	2.005	2.377	3.072	3.855	4.129	5.057
11	0.141	0.174	0.236	0.302	0.397	1.535	1.716	1.954	2.304	2.948	3.664	3.912	4.744
12	0.143	0.176	0.238	0.305	0.400	1.512	1.686	1.913	2.245	2.849	3.512	3.740	4.499
13	0.144	0.178	0.240	0.307	0.402	1.493	1.661	1.879	2.195	2.767	3.388	3.600	4.302
14		0.180			0.404				2.154			3.485	
15		0.181		0.311		1.463		1.825	2.119			3.387	4.004
16	0.148	0.183			0.407		1.605	1.804		2.591	3.125	3.304	3.890
17 18		0.184 0.185	0.247	0.314 0.315		1.441 1.431		1.785 1.769		2.548 2.510	3.061 3.005	3.233 3.171	3.791 3.705
19	0.150	0.186	0.249		0.410	1.423			2.036	2.477	2.956	3.116	3.631
20	0.151	0.187	0.250	0.317	0.412	1.415	1.558		1.999	2.447	2.913	3.067	3.564
21		0.187			0.413				1.982		2.874		3.506
22	0.153	0.188	0.252	0.319	0.414	1.402	1.541	1.718	1.967	2.397	2.839	2.985	3.453
23	0.153	0.189	0.253	0.320	0.415	1.397	1.534	1.708	1.953	2.375	2.808	2.950	3.406
24	0.154	0.189	0.253	0.321	0.416	1.392	1.527	1.700	1.941	2.355	2.779	2.919	3.363
25	0.154	0.190	0.254	0.322	0.417	1.387	1.521	1.691	1.929	2.337	2.753		3.324
26	0.155	0.191		0.322		1.383		1.684				2.863	3.288
27	0.155	0.191		0.323			1.510		1.909	2.305	2.707	2.839	3.256
28	0.156	0.192		0.324		1.375	1.505	1.671	1.900	2.291	2.687	2.817	3.226
29 30	0.156 0.156	0.192 0.192		0.324 0.325	0.419 0.420	1.372 1.369	1.501 1.497	1.665 1.659	1.892 1.884		2.669 2.651	2.796	3.198 3.173
35		0.192		0.325 0.327			1.480	1.636	1.852		2.581		3.069
40		0.195		0.329		1.345		1.619			2.529		2.993
45	0.160	0.197	0.262		0.425		1.457	1.606		2.152		2.598	2.935
50	0.161	0.197	0.263	0.331	0.426	1.332	1.449	1.596	1.796	2.130	2.458	2.563	2.890
55	0.161	0.198	0.264	0.332	0.427	1.327	1.443	1.587	1.785	2.112	2.433	2.535	2.853
60	0.162	0.199	0.264	0.333	0.428	1.323	1.437	1.580	1.775	2.097	2.412	2.512	2.823
65				0.333		1.319					2.394		2.798
70											2.379		
75											2.366		
80 85											2.355		
85 90											2.345 2.336		
95											2.328		
100											2.321		
200											2.256		
500	0.167	0.205	0.271	0.340	0.435	1.283	1.386	1.512	1.683	1.957	2.217	2.299	2.547

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.073	0.095	0.139	0.195	0.298	9.263	14.68	26.40	59.86	240.5	963.3	1505	6022
2	0.099	0.125	0.175	0.235	0.333	3.366	4.371	6.043	9.380	19.38	39.38	49.38	99.37
3	0.115	0.143	0.197		0.356	2.441	2.978	3.794	5.240	8.812	14.47	16.93	
4	0.126	0.156	0.212	0.275	0.371	2.081			3.936		8.905	10.07	
5		0.165						2.627			6.681	7.415	10.16
6		0.172			0.392		2.034		2.958	4.099	5.523	6.055	7.976
7		0.178		0.304				2.241		3.677		5.241	6.719
8		0.183	0.244	0.310	0.405	1.635		2.132		3.388	4.357	4.705	5.911
9		0.187	0.248		0.410	1.591		2.050		3.179	4.026	4.325	5.351
10		0.190			0.414			1.986		3.020		-	4.942
11		0.193	0.256		0.417			1.935			3.588	3.828	4.632
12		0.196				1.505					3.436	3.656	4.388
13		0.198	0.261	0.328	0.423	1.486		1.859				3.516	4.191
14 15				0.331		1.470	1.626	1.804	2.122		3.209	3.401	4.030
16		0.202 0.203	0.265 0.267	0.333 0.335	0.427	1.456 1.443		1.783			3.123 3.049	3.303 3.221	3.895 3.780
17		0.203	0.267	0.336	0.429 0.431	1.443	1.577	1.764		2.494	2.985	3.149	3.682
18		0.204	0.270	0.338	0.431		1.565		2.005		2.929	3.087	3.597
19		0.207				1.414					2.880	3.032	
20		0.208						1.718				2.984	
21		0.209				1.400		1.706					
22		0.210		0.343			1.526		1.933		2.763		
23		0.211						1.686	1.919			2.867	3.299
24	0.175	0.211	0.277	0.345	0.439	1.383	1.512	1.677	1.906	2.300	2.703	2.835	3.256
25	0.175	0.212	0.278	0.346	0.440	1.378	1.506	1.668	1.895	2.282	2.677	2.806	3.217
26	0.176	0.213	0.278	0.346	0.441	1.374	1.500	1.661	1.884	2.265	2.653	2.780	3.182
27	0.176	0.213	0.279	0.347	0.442	1.370	1.495	1.654	1.874	2.250	2.631	2.755	3.149
28	0.177	0.214	0.280	0.348	0.442	1.366	1.490	1.647	1.865	2.236	2.611	2.733	3.120
29	0.177	0.215	0.280	0.349	0.443	1.362	1.485	1.641	1.857	2.223	2.592	2.712	3.092
30	0.178	0.215	0.281	0.349	0.444	1.359	1.481	1.635	1.849	2.211	2.575	2.693	3.067
35	0.180	0.217	0.283	0.352	0.446	1.345	1.464	1.612	1.817	2.161	2.504	2.615	2.963
40	0.181	0.219	0.285	0.354	0.448	1.335	1.451	1.595	1.793	2.124	2.452	2.558	2.888
45	0.182	0.220	0.287	0.355	0.450	1.328	1.440				2.412	2.514	2.830
50		0.221	0.288	0.357	0.451	1.321	1.432		1.760			2.479	
55		0.222	0.289	0.358			1.426		1.748	2.055		2.451	2.748
60		0.223	0.290	0.359	0.453	1.312	1.420	1.555	1.738	2.040	2.334		2.718
65		0.224		0.360		1.308		1.549			2.317		2.693
70		0.224											
75 80		0.225											
80		0.225											
85		0.226											
90 95		0.226 0.226											
95 100		0.220 0.227											
200		0.227 0.229											
500		0.229 0.231											
550	0.102	0.201	0.200	0.000	0.402	1.411	1.001	1.400	1.044	1.000	4.100	4.414	2.770

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.078	0.100	0.144	0.201	0.304	9.320	14.77	26.55	60.19	241.9	968.6	1514	6056
2		0.132	0.183		0.342		4.382	6.054		19.40	39.40	49.39	99.38
$\frac{3}{4}$		0.153 0.167	0.207		0.367 0.384	2.445	2.979	3.792 3.008	5.230 3.920	5.964	14.42 8.844	16.86 10.00	27.23 14.55
5	0.146	0.177	0.236		0.304 0.397	1.890		2.617	3.297	4.735		7.344	
6	0.153	0.186	0.246	0.311	0.406	1.771	2.028	2.383	2.937	4.060	5.461	5.984	7.874
7	0.159	0.192	0.253	0.319	0.414		1.918		2.703	3.637		5.171	6.620
8	0.164	0.198	0.259	0.326	0.421	1.631	1.838	2.117	2.538	3.347	4.295	4.635	5.814
9	0.168	0.202	0.265	0.331	0.426	1.586	1.778	2.035	2.416	3.137	3.964	4.256	5.257
10	0.171	0.206	0.269	0.336	0.431	1.551	1.732	1.970	2.323	2.978	3.717	3.975	4.849
11		0.210	0.273	0.340	0.434	1.523	1.694	1.919		2.854	3.526	3.758	4.539
12		0.213	0.276		0.438		1.663	1.877		2.753		3.587	4.296
13 14	0.179 0.181	0.215 0.217	0.279 0.282	0.346 0.349	0.441 0.443	1.480 1.463	1.637 1.615	1.842 1.812	2.138 2.095	2.671 2.602	3.250 3.147	3.447 3.332	4.100 3.939
15	0.181	0.217	0.284	0.349 0.351	0.446	1.449	1.596	1.787	2.059		3.060	3.235	3.805
16		0.221	0.286		0.448	1.437	1.580	1.765	2.028	2.494		3.152	3.691
17		0.223	0.288		0.450	1.426	1.566	1.745		2.450	2.922	3.080	3.593
18	0.187	0.224	0.290	0.357	0.451	1.416	1.553	1.728	1.977	2.412	2.866	3.018	3.508
19	0.188	0.226	0.291	0.359	0.453	1.407	1.542	1.713	1.956	2.378	2.817	2.963	3.434
20	0.190	0.227	0.293	0.360	0.454	1.399	1.531	1.700	1.937	2.348	2.774	2.915	3.368
21		0.228	0.294	0.362	0.456		1.522	1.688		2.321			3.310
22		0.229	0.295		0.457		1.514		1.904			2.833	3.258
$\frac{23}{24}$		0.230 0.231	0.296 0.297	0.364 0.365	0.458 0.459	1.380 1.375	1.506 1.499	1.666 1.657	1.890 1.877	2.275	2.668 2.640	2.798 2.766	3.211 3.168
25		0.231 0.232	0.298	0.366	0.460		1.493	1.649		2.236		2.737	3.129
26		0.233	0.299	0.367	0.461		1.487	1.641	1.855	2.220		2.711	3.094
27	0.195	0.233	0.300	0.368	0.462	1.361	1.482	1.634	1.845	2.204	2.568	2.686	3.062
28	0.196	0.234	0.301	0.369	0.463	1.358	1.477	1.627	1.836	2.190	2.547	2.664	3.032
29	0.197	0.235	0.301	0.370	0.463	1.354	1.472	1.621	1.827	2.177	2.529	2.643	3.005
30	0.197	0.235	0.302	0.370	0.464	1.351	1.468	1.615	1.819	2.165		2.624	
35		0.238	0.305	0.373	0.467	1.337	1.450	1.592	1.787			2.546	
40		0.240	0.307	0.376	0.469	1.327	1.437			2.077		2.488	2.801
45 50		0.242 0.243	0.309 0.310	0.378 0.379	0.471 0.472	1.319 1.312	1.426 1.418	1.560 1.550	1.744 1.729	2.049	2.348 2.317	2.444 2.410	2.743 2.698
55			0.312	0.380	0.474	1.307	1.411	1.541	1.717	2.008		2.382	2.662
60	0.206	0.245	0.313		0.475	1.303	1.406	1.533	1.707	1.993		2.359	2.632
65	0.207	0.246	0.314	0.382	0.475	1.299	1.401	1.527	1.699	1.980	2.252	2.339	2.607
70	0.207	0.246	0.314	0.383	0.476	1.296	1.397	1.522	1.691	1.969	2.237	2.323	2.585
75					0.477								
80					0.477								
85					0.478								
90 95					0.478 0.479								
100					0.479								
200					0.483								
500					0.485								
	•												

DISTRIBUCION F DE SNEDECOR (11)

GRADOS DE LIBERTAD numerador $\rightarrow 11$

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.082	0.104	0.149	0.206	0.310	9.367	14.84	26.67	60.47	243.0	973.0	1521	6083
2		0.139					4.391			19.40	39.40	49.40	99.39
3		0.161				2.448		3.789	5.222		14.37	16.81	27.13
4						2.082			3.907				14.45
5						1.889			3.282			7.285	9.963
6		0.197			0.419	1.769		2.373	2.920		5.410	5.925	7.790
7			0.266		0.427	1.687		2.217				5.113	
8		0.211 0.216	0.273 0.279	0.339 0.345	0.434	1.627		2.105	2.519	3.313	4.243	4.577	5.734
9 10		0.210		0.340	0.440 0.445	1.582 1.547		2.022 1.957		3.102 2.943	3.912 3.665	4.198 3.917	5.178 4.772
11			0.284	0.355	0.449		1.685		2.302			3.701	4.462
12		0.224 0.227		0.359	0.449 0.453			1.863			3.321	3.529	4.220
13		0.230	0.295	0.362	0.456	1.475	1.628	1.828	2.116		3.197	3.390	4.025
14		0.233	0.298	0.365	0.459	1.458	1.606			2.565	3.095	3.274	
15		0.235	0.300			1.443	1.587	1.772		2.507	3.008	3.177	3.730
16		0.237	0.303		0.464		1.570	1.750	2.005		2.934	3.094	3.616
17		0.239	0.305	0.372	0.466	1.420	1.555	1.730	1.978	2.413	2.870	3.023	3.519
18		0.241	0.307		0.468	1.410	1.543			2.374	2.814	2.960	3.434
19	0.205	0.243	0.308	0.376	0.469	1.401	1.531	1.697	1.932	2.340	2.765	2.906	3.360
20	0.206	0.244	0.310	0.378	0.471	1.393	1.521	1.684	1.913	2.310	2.721	2.857	3.294
21	0.207	0.245	0.311	0.379	0.472	1.386	1.511	1.671	1.896	2.283	2.682	2.814	3.236
22	0.208	0.247	0.313	0.381	0.474	1.379	1.503	1.660	1.880	2.259	2.647	2.775	3.184
23	0.209	0.248	0.314	0.382	0.475	1.374	1.495	1.650	1.866	2.236	2.615	2.740	3.137
24	0.210	0.249	0.315	0.383	0.476	1.368	1.488	1.641	1.853	2.216	2.586	2.708	3.094
25	0.211	0.250	0.316	0.384	0.477	1.363	1.482	1.632	1.841	2.198	2.560	2.679	3.056
26	0.212	0.251	0.317	0.385	0.478	1.359	1.476	1.624	1.830	2.181	2.536	2.652	3.021
27	0.213	0.251	0.318	0.386	0.479	1.354	1.470	1.617	1.820	2.166	2.514	2.628	2.988
28		0.252	0.319	0.387	0.480	1.350	1.465		1.811			2.606	2.959
29		0.253	0.320		0.481		1.461		1.802			2.585	2.931
30			0.321	0.389	0.482	1.343	1.456		1.794		2.458	2.566	2.906
35		0.257	0.324	0.392	0.485	1.329	1.438		1.761		2.387	2.487	2.803
40		0.259	0.327	0.395	0.487		1.424		1.737		2.334		2.727
45		0.261	0.329		0.489 0.491	1.311	1.414 1.405		1.718 1.703	2.009	2.294		2.670 2.625
50 55		0.262 0.264	0.330 0.332	0.399 0.400	0.491 0.492	1.304 1.299	1.399	1.522	1.691	1.986 1.968	2.263 2.237	2.351 2.323	2.589
60	0.224 0.225	0.265	0.333	0.400	0.492 0.494	1.294	1.393	1.515	1.680	1.952	2.216	2.323	2.559
65		0.266		0.403		1.291		1.509	1.672		2.198		2.534
70											2.183		
75											2.170		
80											2.158		
85											2.148		
90											2.140		
95											2.132		
100	0.229	0.270	0.338	0.407	0.499	1.275	1.368	1.482	1.636	1.886	2.124	2.200	2.430
200	0.233	0.274	0.342	0.411	0.503	1.260	1.349	1.458	1.603	1.837	2.058	2.127	2.338
500	0.235	0.276	0.345	0.414	0.505	1.251	1.338	1.443	1.583	1.808	2.019	2.084	2.283

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.085	0.107	0.153	0.211	0.315	9.406	14.90	26.78	60.71	243.9	976.7	1526	6106
2	0.118	0.144	0.196	0.257	0.356	3.393	4.399	6.070	9.408	19.41	39.41	49.41	99.40
$\frac{3}{4}$	0.138 0.153	0.168 0.185	0.224 0.243	0.287	0.384 0.403	2.450	2.981 2.455	3.787 2.996		8.745 5.912	14.34 8.751	16.76 9.894	$\frac{27.05}{14.37}$
5	0.165	0.195	0.245 0.257		0.403		2.433		3.268	4.678	6.525	7.235	9.888
6		0.207	0.268		0.419			2.364		4.000	5.366	5.876	7.718
7		0.216	0.277		0.438		1.906		2.668	3.575	4.666	5.064	
8	0.187	0.222	0.285	0.351	0.446	1.624	1.825	2.095	2.502	3.284	4.200	4.528	5.667
9	0.192	0.228	0.291	0.358	0.452	1.579	1.764	2.011	2.379	3.073	3.868	4.149	5.111
10	0.197	0.233	0.296	0.363	0.457	1.543	1.716	1.946	2.284	2.913	3.621	3.868	4.706
11	0.200	0.237	0.301	0.368	0.462	1.514	1.678	1.894	2.209	2.788	3.430	3.652	4.397
12	0.204	0.241	0.305	0.372	0.466	1.490	1.646	1.851	2.147	2.687	3.277	3.480	4.155
13		0.244	0.309	0.376	0.469	1.470	1.620	1.815	2.097	2.604	3.153	3.341	3.960
14		0.247	0.312	0.379	0.472	1.453	1.598	1.785		2.534	3.050	3.225	3.800
15		0.249	0.315	0.382	0.475	1.438	1.578	1.759	2.017	2.475	2.963	3.128	3.666
16 17		0.252 0.254	0.317 0.320	0.385 0.387	0.478 0.480	1.426 1.414	1.561 1.547	1.736 1.717	1.985 1.958	2.425 2.381	2.889 2.825	3.045 2.973	3.553 3.455
18	0.210	0.254 0.256	0.320 0.322	0.389	0.480		1.534	1.699	1.933	2.342	2.769	2.911	3.371
19	0.219	0.258	0.324	0.391	0.484	1.395	1.522	1.684	1.912	2.308	2.720	2.856	3.297
20	0.221	0.259	0.325	0.393	0.486	1.387	1.512	1.670	1.892	2.278	2.676	2.808	3.231
21	0.222	0.261	0.327	0.395	0.487	1.380	1.502	1.657	1.875	2.250	2.637	2.764	3.173
22	0.223	0.262	0.329	0.396	0.489	1.374	1.494	1.646	1.859	2.226	2.602	2.725	3.121
23	0.225	0.263	0.330	0.398	0.490	1.368	1.486	1.636	1.845	2.204	2.570	2.690	3.074
24	0.226	0.265	0.331	0.399	0.491	1.362	1.479	1.626	1.832	2.183	2.541	2.658	3.032
25	0.227	0.266	0.332	0.400	0.492		1.472	1.618	1.820			2.629	2.993
26	0.228	0.267	0.334		0.493		1.466	1.610				2.603	2.958
27 28	0.229	0.268	0.335		0.494	1.348	1.461	1.602	1.799	2.132 2.118	2.469	2.579	2.926
29	0.229 0.230	0.269 0.269	0.336 0.337	0.404	0.495 0.496	1.344 1.340	1.455 1.451	1.596 1.589	1.790 1.781	2.116	2.448	2.556 2.535	2.896 2.868
30	0.231	0.270	0.337	0.405	0.497		1.446	1.583	1.773		2.412		2.843
35		0.274	0.341	0.409	0.501			1.559	1.739	2.041		2.437	2.740
40	0.237	0.276	0.344		0.503		1.414		1.715			2.380	2.665
45	0.238	0.278	0.346	0.415	0.506	1.304	1.403	1.527	1.695	1.974	2.248	2.336	2.608
50	0.240	0.280	0.348	0.416	0.508	1.297	1.394	1.516	1.680	1.952	2.216	2.301	2.562
55	0.241	0.282	0.350	0.418	0.509	1.292	1.387	1.506	1.668	1.933	2.190	2.273	2.526
60	0.243	0.283	0.351	0.419	0.510	1.287	1.382	1.499	1.657	1.917		2.249	2.496
65		0.284	0.352		0.511	1.283	1.377	1.492	1.649	1.904	_	2.230	2.471
70		0.285						1.487			2.136		
75 80		0.286 0.286											
85		0.280 0.287											
90		0.287											
95		0.288											
100	0.248	0.288	0.357	0.426	0.516	1.267	1.356	1.465	1.612	1.850	2.077	2.149	2.368
200	0.252	0.293	0.362	0.430	0.521	1.252	1.337	1.441	1.579	1.801	2.010	2.076	2.275
500	0.254	0.296	0.365	0.433	0.523	1.243	1.325	1.426	1.559	1.772	1.971	2.033	2.220

DISTRIBUCION F DE SNEDECOR (13)

GRADOS DE LIBERTAD numerador $\rightarrow 13$

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.088	0.110	0.156	0.214	0.319	9.440	14.95	26.87	60.90	244.7	979.8	1531	6126
2	0.122	0.149	0.201	0.263	0.362	3.400	4.405	6.076	9.414	19.42	39.42	49.42	99.41
3			0.230								14.30	16.72	26.98
4			0.250										14.31
5			0.265				2.180					7.192	
6		0.216		0.343			2.014		2.892	3.976	5.329	5.833	7.657
7		0.225	0.287 0.295		0.448		1.901 1.820					5.021	
8 9		0.232 0.239	0.295	0.361	0.456 0.462		1.758				3.831	4.486 4.107	5.609 5.055
10			0.302								3.583	3.826	4.650
11			0.313				1.672					3.610	4.342
12	_		0.317								3.239		4.100
13		0.256	0.321		0.481	1.466		1.804			3.115	3.299	3.905
14		0.259		0.392			1.590				3.012	3.183	3.745
15	0.224	0.262	0.328	0.395	0.487	1.434	1.571	1.748	2.000	2.448	2.925	3.086	3.612
16	0.227	0.265	0.330	0.398	0.490	1.421	1.554	1.725	1.968	2.397	2.851	3.003	3.498
17	0.229	0.267	0.333	0.400	0.492	1.409	1.539	1.705	1.940	2.353	2.786	2.931	3.401
18	0.231	0.269	0.335	0.403	0.494	1.399	1.526	1.687	1.916	2.314	2.730	2.869	3.316
19	0.233	0.271	0.337	0.405	0.496	1.390	1.514	1.672	1.894	2.280	2.681	2.814	3.242
20			0.339				1.503		1.875	2.250	2.637	2.765	3.177
21			0.341							2.222			
22	0.237	0.276								2.198			3.067
23	0.238		0.344										3.020
$\frac{24}{25}$			0.346 0.347							2.136		2.616	2.977 2.939
26		0.281	0.348							2.119			2.904
27	0.243	0.282	0.349	0.417	0.508			1.589		2.103	2.429	2.536	2.871
28			0.350				1.447				2.409		
29	0.245	0.284	0.351	0.419	0.510	1.335	1.442	1.576	1.762	2.075	2.390	2.492	2.814
30	0.246	0.285	0.352	0.420	0.511	1.331	1.437	1.570	1.754	2.063	2.372	2.473	2.789
35	0.249	0.289	0.357	0.424	0.515	1.317	1.418	1.546	1.720	2.012	2.301	2.394	2.686
40	0.252	0.292	0.360	0.428	0.518	1.306	1.404	1.527	1.695	1.974	2.248	2.336	2.611
45	0.254	0.294	0.362	0.430	0.520		1.393	1.513			2.208	2.292	2.553
50			0.364					1.502	1.660	1.921		2.257	2.508
55		0.298		0.434			1.378		1.648		2.150		
60	0.259	0.299	0.368	0.435	0.525	1.280	1.372		1.637		2.129		
65 70	0.260	0.300	0.369 0.370	0.437			1.367			1.874			
75			0.370										
80			0.371 0.372										
85			0.373										
90			0.373										
95			0.374										
100			0.374										
200	0.269	0.311	0.380	0.448	0.536	1.245	1.326	1.425	1.558	1.769	1.969	2.031	2.220
500	0.272	0.314	0.383	0.451	0.540	1.236	1.314	1.410	1.537	1.740	1.929	1.988	2.166

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1 0.090 0.113 0.159 0.217 0.322 9.468 15.00 26.94 61.07 245.4 982.5 1535 6143 2 0.126 0.153 0.206 0.267 0.367 3.405 4.410 6.082 9.420 19.42 39.42 49.42 99.4 3 0.150 0.180 0.236 0.299 0.396 2.454 2.982 3.784 5.205 8.715 14.28 16.69 26.9 4 0.167 0.199 0.257 0.321 0.418 2.083 2.452 2.987 3.878 5.873 8.684 9.815 14.2 5 0.180 0.213 0.273 0.338 0.433 1.886 2.178 2.589 3.247 4.636 6.456 7.156 9.77 6 0.190 0.224 0.286 0.351 0.446 1.764 2.010 2.350 2.881 3.956 5.297 5.797 7.60 7 0.199 0.234 0.296 0.362 0.466 1.680 1.897 2.19	0
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4 0.167 0.199 0.257 0.321 0.418 2.083 2.452 2.987 3.878 5.873 8.684 9.815 14.2 5 0.180 0.213 0.273 0.338 0.433 1.886 2.178 2.589 3.247 4.636 6.456 7.156 9.77 6 0.190 0.224 0.286 0.351 0.446 1.764 2.010 2.350 2.881 3.956 5.297 5.797 7.60 7 0.199 0.234 0.296 0.362 0.456 1.680 1.897 2.192 2.643 3.529 4.596 4.985 6.35 8 0.206 0.242 0.304 0.371 0.464 1.619 1.815 2.079 2.475 3.237 4.130 4.449 5.55 9 0.212 0.248 0.312 0.378 0.471 1.573 1.753 1.994 2.351 3.025 3.798 4.071 5.00 10 0.217 0.254 0.318 0.384 0.477 1.537 1.705 1.	
5 0.180 0.213 0.273 0.338 0.433 1.886 2.178 2.589 3.247 4.636 6.456 7.156 9.77 6 0.190 0.224 0.286 0.351 0.446 1.764 2.010 2.350 2.881 3.956 5.297 5.797 7.60 7 0.199 0.234 0.296 0.362 0.456 1.680 1.897 2.192 2.643 3.529 4.596 4.985 6.35 8 0.206 0.242 0.304 0.371 0.464 1.619 1.815 2.079 2.475 3.237 4.130 4.449 5.55 9 0.212 0.248 0.312 0.378 0.471 1.573 1.753 1.994 2.351 3.025 3.798 4.071 5.00 10 0.217 0.254 0.318 0.384 0.477 1.537 1.705 1.927 2.255 2.865 3.550 3.790 4.60 11 0.222 0.259 0.323 0.390 0.482 1.507 1.666 1	
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7 0.199 0.234 0.296 0.362 0.456 1.680 1.897 2.192 2.643 3.529 4.596 4.985 6.35 8 0.206 0.242 0.304 0.371 0.464 1.619 1.815 2.079 2.475 3.237 4.130 4.449 5.55 9 0.212 0.248 0.312 0.378 0.471 1.573 1.753 1.994 2.351 3.025 3.798 4.071 5.00 10 0.217 0.254 0.318 0.384 0.477 1.537 1.705 1.927 2.255 2.865 3.550 3.790 4.60 11 0.222 0.259 0.323 0.390 0.482 1.507 1.666 1.874 2.179 2.739 3.359 3.573 4.29 12 0.226 0.263 0.328 0.395 0.487 1.483 1.634 1.831 2.117 2.637 3.206 3.402 4.05 13 0.229 0.267 0.332 0.399 0.491 1.462 1.607 <td< td=""><td></td></td<>	
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11 0.222 0.259 0.323 0.390 0.482 1.507 1.666 1.874 2.179 2.739 3.359 3.573 4.29 12 0.226 0.263 0.328 0.395 0.487 1.483 1.634 1.831 2.117 2.637 3.206 3.402 4.05 13 0.229 0.267 0.332 0.399 0.491 1.462 1.607 1.795 2.066 2.554 3.082 3.262 3.85 14 0.233 0.270 0.336 0.403 0.494 1.445 1.584 1.764 2.022 2.484 2.979 3.146 3.69 15 0.235 0.274 0.339 0.406 0.498 1.430 1.564 1.738 1.985 2.424 2.891 3.049 3.56 16 0.238 0.276 0.342 0.409 0.500 1.417 1.547 1.715 1.953 2.373 2.817 2.966 3.45 17 0.240 0.279 0.345 0.412 0.503 1.405 1.532	
12 0.226 0.263 0.328 0.395 0.487 1.483 1.634 1.831 2.117 2.637 3.206 3.402 4.05 13 0.229 0.267 0.332 0.399 0.491 1.462 1.607 1.795 2.066 2.554 3.082 3.262 3.85 14 0.233 0.270 0.336 0.403 0.494 1.445 1.584 1.764 2.022 2.484 2.979 3.146 3.69 15 0.235 0.274 0.339 0.406 0.498 1.430 1.564 1.738 1.985 2.424 2.891 3.049 3.56 16 0.238 0.276 0.342 0.409 0.500 1.417 1.547 1.715 1.953 2.373 2.817 2.966 3.45 17 0.240 0.279 0.345 0.412 0.503 1.405 1.532 1.695 1.925 2.329 2.753 2.894 3.35 18 0.243 0.281 0.347 0.414 0.505 1.395 1.519	1
13 0.229 0.267 0.332 0.399 0.491 1.462 1.607 1.795 2.066 2.554 3.082 3.262 3.85 14 0.233 0.270 0.336 0.403 0.494 1.445 1.584 1.764 2.022 2.484 2.979 3.146 3.69 15 0.235 0.274 0.339 0.406 0.498 1.430 1.564 1.738 1.985 2.424 2.891 3.049 3.56 16 0.238 0.276 0.342 0.409 0.500 1.417 1.547 1.715 1.953 2.373 2.817 2.966 3.45 17 0.240 0.279 0.345 0.412 0.503 1.405 1.532 1.695 1.925 2.329 2.753 2.894 3.35 18 0.243 0.281 0.347 0.414 0.505 1.395 1.519 1.677 1.900 2.290 2.696 2.832 3.26	3
14 0.233 0.270 0.336 0.403 0.494 1.445 1.584 1.764 2.022 2.484 2.979 3.146 3.69 15 0.235 0.274 0.339 0.406 0.498 1.430 1.564 1.738 1.985 2.424 2.891 3.049 3.56 16 0.238 0.276 0.342 0.409 0.500 1.417 1.547 1.715 1.953 2.373 2.817 2.966 3.45 17 0.240 0.279 0.345 0.412 0.503 1.405 1.532 1.695 1.925 2.329 2.753 2.894 3.35 18 0.243 0.281 0.347 0.414 0.505 1.395 1.519 1.677 1.900 2.290 2.696 2.832 3.26	2
15 0.235 0.274 0.339 0.406 0.498 1.430 1.564 1.738 1.985 2.424 2.891 3.049 3.56 16 0.238 0.276 0.342 0.409 0.500 1.417 1.547 1.715 1.953 2.373 2.817 2.966 3.45 17 0.240 0.279 0.345 0.412 0.503 1.405 1.532 1.695 1.925 2.329 2.753 2.894 3.35 18 0.243 0.281 0.347 0.414 0.505 1.395 1.519 1.677 1.900 2.290 2.696 2.832 3.26	7
16 0.238 0.276 0.342 0.409 0.500 1.417 1.547 1.715 1.953 2.373 2.817 2.966 3.45 17 0.240 0.279 0.345 0.412 0.503 1.405 1.532 1.695 1.925 2.329 2.753 2.894 3.35 18 0.243 0.281 0.347 0.414 0.505 1.395 1.519 1.677 1.900 2.290 2.696 2.832 3.26	8
17	
18 0.243 0.281 0.347 0.414 0.505 1.395 1.519 1.677 1.900 2.290 2.696 2.832 3.26	
20	
21 0.248 0.287 0.354 0.421 0.511 1.370 1.487 1.634 1.841 2.197 2.564 2.685 3.07	
22 0.250 0.289 0.355 0.423 0.513 1.364 1.478 1.623 1.825 2.173 2.528 2.646 3.01	9
23 0.251 0.290 0.357 0.424 0.515 1.357 1.470 1.612 1.811 2.150 2.497 2.610 2.97	3
24 0.252 0.292 0.359 0.426 0.516 1.352 1.463 1.603 1.797 2.130 2.468 2.578 2.93	0
25 0.254 0.293 0.360 0.427 0.517 1.347 1.456 1.594 1.785 2.111 2.441 2.549 2.89	2
26 0.255 0.294 0.361 0.429 0.519 1.342 1.450 1.586 1.774 2.094 2.417 2.523 2.85	7
27 0.256 0.296 0.363 0.430 0.520 1.337 1.444 1.578 1.764 2.078 2.395 2.498 2.82	
28 0.257 0.297 0.364 0.431 0.521 1.333 1.439 1.571 1.754 2.064 2.374 2.475 2.79	
29 0.258 0.298 0.365 0.432 0.522 1.330 1.434 1.565 1.745 2.050 2.355 2.455 2.76 30 0.259 0.299 0.366 0.433 0.523 1.326 1.429 1.559 1.737 2.037 2.338 2.435 2.74	
35	
40 0.266 0.306 0.374 0.441 0.530 1.300 1.396 1.515 1.678 1.948 2.213 2.298 2.56	
45 0.268 0.309 0.377 0.444 0.533 1.292 1.385 1.501 1.658 1.918 2.172 2.254 2.50	
50 0.270 0.311 0.379 0.446 0.535 1.285 1.376 1.489 1.643 1.895 2.140 2.219 2.46	1
55 0.272 0.313 0.381 0.448 0.537 1.279 1.369 1.480 1.630 1.876 2.114 2.190 2.42	4
60 0.274 0.314 0.383 0.450 0.538 1.274 1.363 1.472 1.619 1.860 2.093 2.167 2.39	4
65 0.275 0.316 0.384 0.451 0.540 1.270 1.358 1.465 1.610 1.847 2.075 2.147 2.36	
70 0.276 0.317 0.385 0.452 0.541 1.267 1.353 1.460 1.603 1.836 2.059 2.130 2.34	
75 0.277 0.318 0.386 0.453 0.542 1.264 1.350 1.455 1.596 1.826 2.046 2.116 2.32	
80 0.278 0.319 0.387 0.454 0.543 1.262 1.346 1.450 1.590 1.817 2.035 2.103 2.31	
85 0.278 0.319 0.388 0.455 0.543 1.259 1.343 1.447 1.585 1.810 2.024 2.092 2.29 90 0.279 0.320 0.389 0.456 0.544 1.257 1.341 1.443 1.581 1.803 2.015 2.082 2.28	
95 0.280 0.321 0.389 0.450 0.544 1.257 1.341 1.443 1.361 1.303 2.013 2.082 2.28 95 0.280 0.321 0.389 0.457 0.545 1.255 1.338 1.440 1.577 1.797 2.007 2.073 2.27	
100 0.280 0.321 0.390 0.457 0.545 1.253 1.336 1.436 1.573 1.792 2.000 2.066 2.26	
200 0.285 0.327 0.396 0.463 0.551 1.238 1.316 1.412 1.539 1.742 1.932 1.992 2.17	
500 0.289 0.330 0.400 0.467 0.554 1.229 1.304 1.396 1.518 1.712 1.892 1.948 2.11	

DISTRIBUCION F DE SNEDECOR (15)

GRADOS DE LIBERTAD numerador $\rightarrow 15$

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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.093	0.115	0.161	0.220	0.325	9.493	15.04	27.01	61.22	245.9	984.9	1539	6157
2		0.157	0.210		0.371				9.425		39.43	49.43	99.42
3		0.185	0.241		0.402		2.982	3.783	5.200		14.25	16.66	26.87
4		0.204				2.083			3.870	5.858	8.657	9.783	14.20
5		0.220			0.440				3.238		6.428	7.123	9.722
6 7		0.232 0.241	0.293	0.358 0.369	0.453 0.463	1.762 1.678	2.007 1.893	2.345	2.871 2.632	3.938 3.511	5.269 4.568	5.765 4.953	7.559 6.314
8		0.250	0.313	0.379	0.403 0.472	1.617		2.072		3.218	4.101	4.417	5.515
9		0.257	0.320	0.386	0.479	1.570	1.749	1.986		3.006	3.769	4.039	4.962
10		0.263	0.327		0.486	1.534			2.244		3.522	3.758	4.558
11	0.231	0.268	0.332	0.399	0.491	1.504	1.661	1.867	2.167	2.719	3.330	3.542	4.251
12	0.235	0.273	0.337	0.404	0.496	1.480	1.628	1.823	2.105	2.617	3.177	3.370	4.010
13	0.239	0.277	0.342	0.408	0.500	1.459	1.601	1.786	2.053	2.533	3.053	3.230	3.815
14	0.243	0.281	0.346	0.412	0.504	1.441	1.578	1.755	2.010	2.463	2.949	3.114	3.656
15	0.246	0.284	0.349	0.416	0.507	1.426	1.558	1.729	1.972	2.403	2.862	3.017	3.522
16	0.249	0.287	0.353	0.419		1.413	1.541			2.352	2.788	2.934	3.409
17	0.251	0.290	0.356	0.422	0.513	1.401	1.526	1.686		2.308	2.723	2.862	3.312
18	0.253	0.292	0.358	0.425	0.515	1.391	1.513	1.668	1.887		2.667	2.799	3.227
19		0.294					1.500	1.652		2.234		2.744	
20		0.297	0.363		0.520		1.490		1.845			2.695	3.088
$\frac{21}{22}$		0.299 0.300	0.365 0.367		0.522 0.523	1.366 1.359	1.480 1.471		1.827 1.811			2.613	2.978
23			0.369	0.435	0.525		1.463		1.796			2.578	2.931
24		0.304			0.527	1.347	1.456			2.108	2.437	2.545	2.889
25		0.305		0.439	0.528	1.342	1.449		1.771		2.411	2.516	2.850
26		0.306	0.373	0.440	0.529	1.337	1.443	1.576	1.760	2.072	2.387		2.815
27	0.268	0.308	0.375	0.441	0.531	1.333	1.437	1.568	1.749	2.056	2.364	2.465	2.783
28	0.269	0.309	0.376	0.443	0.532	1.329	1.432	1.561	1.740	2.041	2.344	2.442	2.753
29	0.270	0.310	0.377	0.444	0.533	1.325	1.427	1.554	1.731	2.027	2.325	2.421	2.726
30	0.271	0.311	0.378	0.445	0.534	1.321	1.422	1.548	1.722	2.015	2.307	2.402	2.700
35	0.276	0.316	0.383	0.450	0.538	1.306	1.403	1.523	1.688	1.963	2.235	2.323	2.597
40		0.319	0.387		0.542				1.662				2.522
45		0.322	0.390		0.545	1.286	1.377				2.141	2.220	2.464
50		0.325	0.392	0.459	0.547	1.280	1.368	1.478	1.627	1.871		2.185	2.419
55 60	0.286 0.287	0.327 0.328	0.394	0.461 0.463	0.549 0.550	1.274	1.361 1.355	1.468	1.614 1.603	1.852 1.836	2.083 2.061	2.156	2.382
60 65	0.289	0.330	0.398			1.269 1.265	1.350	1.461 1.454		1.823		2.133 2.113	
70		0.331											
75		0.332											
80		0.333											
85		0.334											
90		0.335											
95	0.294	0.335	0.404	0.470	0.557	1.250	1.330	1.428	1.560	1.773	1.975	2.039	2.233
100	0.295	0.336	0.404	0.471	0.558	1.248	1.328	1.426	1.557	1.768	1.968	2.031	2.223
200	0.300	0.342	0.411	0.477	0.564	1.232	1.308	1.400	1.522	1.717	1.900	1.957	2.129
500	0.304	0.346	0.415	0.481	0.567	1.223	1.295	1.384	1.501	1.686	1.859	1.913	2.075

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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.095	0.117	0.164	0.223	0.328	9.515	15.07	27.07	61.35	246.5	986.9	1542	6170
2	0.133	0.161			0.375		4.419	6.091		19.43	39.43	49.43	99.42
3		0.189			0.406			3.782			14.23	16.63	26.83
4		0.210		0.333 0.351	0.429		2.449				8.633		14.15
5 6		0.225 0.238	0.286 0.299	0.365	0.440 0.459		2.173			3.922	6.403 5.244		9.680 7.519
7		0.248		0.376							4.543		6.275
8		0.257	0.320	0.386					2.455		4.076		5.477
9	0.228	0.265	0.328	0.394	0.487	1.568	1.745	1.980	2.329	2.989	3.744	4.011	4.924
10	0.234	0.271	0.335	0.401	0.493	1.531	1.696	1.913	2.233	2.828	3.496	3.730	4.520
11	0.239	0.277	0.341	0.407	0.499	1.501	1.656	1.860	2.156	2.701	3.304	3.513	4.213
12	0.244	0.281	0.346	0.412	0.504	1.477	1.624	1.816	2.094	2.599	3.152	3.341	3.972
13		0.286	0.351		0.508		1.596	1.779	2.042			3.201	
14	0.252	0.290	0.355	0.421	0.512		1.573	1.748	1.998			3.086	3.619
15	0.255	0.293	0.359	0.425	0.515		1.553	1.721		2.385	2.836		3.485
$\frac{16}{17}$	0.258 0.261	0.297 0.299	0.362 0.365	0.429 0.432	0.519 0.522		1.536 1.520	1.698 1.677		2.333 2.289	2.761 2.697	2.905 2.833	3.372 3.275
18	0.261	0.302	0.368	0.434			1.507	1.659		2.250	2.640	2.770	3.190
19	0.266	0.305	0.371	0.437	0.527	1.378	1.495	1.643		2.215	2.591	2.715	3.117
20	0.268	0.307	0.373	0.439	0.529	1.370	1.484	1.629	1.833	2.184	2.547	2.666	3.051
21	0.270	0.309	0.375	0.442	0.531	1.362	1.474	1.616	1.815	2.156	2.507	2.623	2.993
22	0.272	0.311	0.377	0.444	0.533	1.355	1.465	1.604	1.798	2.131	2.472	2.584	2.941
23	0.273	0.313	0.379	0.446	0.534	1.349	1.457	1.594	1.784	2.109	2.440	2.548	2.894
24	0.275	0.314	0.381	0.447	0.536	1.343	1.450	1.584	1.770	2.088	2.411	2.516	2.852
25	0.276	0.316		0.449			1.443		1.758		2.384		
26				0.451		1.333		1.567			2.360		2.778
27 28	0.279 0.280	0.319 0.320	0.386 0.387	0.452 0.453	0.540 0.542		1.431 1.425	1.559 1.552	1.736 1.726	2.036 2.021	2.337 2.317	2.436 2.413	2.746
29	0.280	0.320 0.321	0.388	0.455	0.542 0.543	1.325 1.321	1.420	1.545	1.720	2.021	2.298		2.716 2.689
30	0.283	0.323	0.389			1.317		1.539	1.709	1.995		2.372	
35	0.287	0.327	0.395			1.302					2.207		
40	0.291	0.331	0.399	0.465	0.552	1.291	1.381	1.495	1.649	1.904	2.154	2.234	2.484
45	0.294	0.334	0.402	0.468	0.555	1.282	1.370	1.480	1.629	1.874	2.113	2.190	2.427
50	0.296	0.337	0.405	0.471	0.558	1.275	1.361	1.468	1.613	1.850	2.081	2.154	2.382
55	0.298	0.339	0.407	0.473	0.560			1.458	1.600			2.126	2.345
60		0.341		0.475	0.561	1.264		1.450	1.589	1.815		2.102	
65		0.343		0.476		1.260		1.444				2.082	
70 75											1.999		
75 80											1.986 1.974		
85											1.964		
90											1.955		
95											1.946		
100	0.308	0.349	0.417	0.483	0.569	1.243	1.320	1.415	1.542	1.746	1.939	2.000	2.185
200	0.315	0.356	0.424	0.490	0.575	1.227	1.300	1.389	1.507	1.694	1.870	1.925	2.091
500	0.319	0.360	0.429	0.495	0.579	1.217	1.287	1.373	1.485	1.664	1.830	1.881	2.036

DISTRIBUCION F DE SNEDECOR (17)

GRADOS DE LIBERTAD numerador $\rightarrow 17$

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.096	0.119	0.166	0.225	0.330	9.535	15.10	27.12	61.46	246.9	988.7	1545	6181
2	0.136	0.164	0.217	0.278	0.378	3.418	4.423	6.094	9.432	19.44	39.44	49.44	99.42
3			0.249				2.982				14.21	16.61	26.79
4			0.273										14.11
5			0.291				2.171		3.223			7.070	
6			0.305				2.001		2.855	3.908	5.222		7.483
7			0.317				1.887			3.480		4.900	
8	0.228	0.264		0.392 0.401	0.485		1.804						
9 10	0.235 0.241		0.335 0.342			1.566	1.692				3.722		4.890 4.487
11			0.348				1.652					3.488	4.180
12		0.289		0.420							3.129		3.939
13		0.294		0.425	0.515		1.592				3.004		3.745
14			0.363			1.435	1.569		1.988		2.900	3.060	3.586
15	0.264		0.367					1.714				2.963	3.452
16	0.267	0.305	0.371	0.437	0.526	1.407	1.531	1.691	1.917	2.317	2.738	2.879	3.339
17	0.270	0.308	0.374	0.440	0.529	1.395	1.516	1.670	1.889	2.272	2.673	2.807	3.242
18	0.272	0.311	0.377	0.443	0.532	1.384	1.502	1.652	1.864	2.233	2.617	2.745	3.158
19	0.275	0.314	0.380	0.446	0.535	1.375	1.490	1.636	1.841	2.198	2.567	2.690	3.084
20	0.277	0.316	0.382	0.448	0.537	1.367	1.479	1.621	1.821	2.167	2.523	2.641	3.018
21	0.279	0.319	0.385	0.451	0.539	1.359	1.469	1.608	1.803	2.139	2.483	2.597	2.960
22	0.281	0.321	0.387	0.453	0.541		1.460				2.448		2.908
23		0.323		0.455							2.416		
24	0.285		0.391				1.444			2.070		2.490	
25			0.392				1.437				2.360		
26	0.288	0.328	0.394	0.460		1.330	1.431				2.335		
27 28	0.289 0.291	0.329 0.330	0.396 0.397	0.462 0.463		1.325	1.425 1.419	1.551		2.018		2.409	2.713 2.683
29			0.398				1.414				2.232		2.656
30			0.400				1.410			1.976		2.346	2.630
35		0.338	0.405	0.471			1.390			1.924		2.266	2.527
40			0.409		0.562		1.375		1.636		2.129		2.451
45	0.305	0.346	0.413	0.479	0.565	1.278	1.364	1.471	1.616	1.855	2.088	2.163	2.393
50	0.308	0.349	0.416	0.481	0.567	1.270	1.355	1.459	1.600	1.831	2.056	2.127	2.348
55	0.310	0.351	0.418	0.484	0.569	1.265	1.347	1.449	1.587	1.812	2.029	2.098	2.311
60	0.312	0.353	0.420	0.486	0.571	1.260	1.341	1.441	1.576	1.796	2.008	2.075	2.281
65	0.314	0.354	0.422	0.488	0.573	1.255	1.336	1.434	1.567	1.782	1.989	2.055	2.256
70	0.315	0.356	0.423	0.489	0.574	1.252	1.331	1.428	1.559	1.771	1.974	2.038	2.234
75			0.425										
80			0.426										
85			0.427										
90			0.428										
95 100			0.429 0.429										
100 200			0.429 0.437										
500			0.437 0.442										
500	0.002	J.J14	J. 172	5.501	0.000	1.212	1.200	1.502	1.111	1.040	1.000	1.000	2.002

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.098	0.121	0.167	0.227	0.333	9.552	15.13	27.17	61.57	247.3	990.3	1548	6192
2	0.139	0.166	0.219		0.381		4.426	6.098	9.436	19.44	39.44	49.44	99.43
3	0.166	0.196	0.253		0.414		2.983	3.779	5.190		14.20	16.59	26.75
4 5		0.218 0.235	0.277 0.296		0.437 0.455		2.447 2.169		3.853 3.217	5.821 4.579	8.592 6.362	9.708 7.048	14.08 9.610
6		0.249	0.230	0.376	0.455 0.470	1.759	1.999	2.331	2.848	3.896	5.202	5.689	7.451
7		0.260	0.323		0.481		1.884		2.607	3.467	4.501	4.878	6.209
8		0.270	0.333		0.491			2.055	2.438	3.173		4.342	5.412
9	0.241	0.278	0.341	0.407	0.499	1.564	1.738	1.969	2.312	2.960	3.701	3.963	4.860
10	0.248	0.285	0.349	0.415	0.506	1.527	1.688	1.902	2.215	2.798	3.453	3.682	4.457
11	0.254	0.291	0.355	0.421	0.512	1.497	1.648	1.847	2.138	2.671	3.261	3.466	4.150
12	0.259	0.297	0.361	0.427	0.517	1.472	1.616	1.803	2.075	2.568	3.108	3.293	3.909
13	0.264	0.302	0.366	0.432	0.522	1.451	1.588	1.766	2.023	2.484		3.153	3.716
14	0.268	0.306	0.371	0.437	0.526		1.564	1.735	1.978	2.413	2.879	3.037	3.556
15	0.272	0.310	0.375	0.441	0.530		1.544	1.708	1.941	2.353		2.940	3.423
16 17	0.275 0.278	0.313 0.317	0.379 0.382	0.445 0.448	0.533 0.537		1.527 1.511			2.302 2.257		2.856 2.784	3.310 3.212
18	0.278	0.317	0.385	0.443	0.539	1.381	1.497	1.645	1.854		2.596	2.722	3.128
19	0.283	0.322	0.388	0.454	0.542	1.372	1.485	1.629	1.831	2.182	2.546	2.666	3.054
20	0.286	0.325	0.391	0.456	0.544	1.363	1.474	1.614	1.811	2.151	2.501	2.617	2.989
21	0.288	0.327	0.393	0.459	0.547	1.356	1.464	1.601	1.793	2.123	2.462	2.574	2.931
22	0.290	0.330	0.395	0.461	0.549	1.349	1.455	1.589	1.777	2.098	2.426	2.534	2.879
23	0.292	0.332	0.398	0.463	0.551	1.342	1.447	1.578	1.762	2.075	2.394	2.499	2.832
24	0.294	0.333	0.400	0.465	0.552	1.337	1.439	1.569	1.748	2.054	2.365	2.466	2.789
25	0.296	0.335	0.401	0.467	0.554	1.331	1.432	1.559	1.736			2.437	2.751
26	0.297	0.337	0.403	0.469	0.556		1.426		1.724		2.314		2.715
27 28	0.299	0.338	0.405	0.470	0.557		1.420	1.543	1.714			2.385	2.683
29	0.300	0.340 0.341	0.406 0.408	0.472 0.473	0.558 0.560	1.313	1.414 1.409	1.536 1.529	1.704 1.695	1.987 1.973	2.270 2.251	2.363 2.342	2.653 2.626
30	0.303	0.343	0.409	0.475	0.561	1.310	1.404	1.523	1.686	1.960		2.322	
35	0.308	0.348	0.415	0.480	0.566		1.384		1.651	1.907		2.242	
40	0.312	0.353	0.419	0.485	0.570	1.283	1.370	1.478	1.625	1.868	2.107	2.183	2.421
45	0.316	0.356	0.423	0.488	0.573	1.274	1.358	1.463	1.605	1.838	2.066	2.138	2.363
50	0.319	0.359	0.426	0.491	0.576	1.266	1.349	1.451	1.588	1.814	2.033	2.103	2.318
55	0.321	0.362	0.429		0.578	1.260	1.341	1.441	1.575	1.795	2.006	2.074	2.281
60	0.323	0.364	0.431	0.496	0.580	1.255	1.335	1.433	1.564	1.778	1.985	2.050	2.251
65	0.325	0.366	0.433	0.498	0.582	1.251	1.329	1.426	1.555	1.765	1.966	2.030	2.225
70 75	0.326	0.367						1.420		1.753		2.013	
75 80								1.415 1.410					
85								1.416					
90								1.402					
95								1.399					
100	0.332	0.373	0.441	0.506	0.589	1.234	1.307	1.396	1.516	1.708	1.890	1.947	2.120
200	0.340	0.381	0.449	0.513	0.596	1.217	1.286	1.369	1.480	1.656	1.820	1.871	2.026
500	0.345	0.386	0.454	0.518	0.601	1.207	1.273	1.353	1.458	1.625	1.779	1.826	1.970

DISTRIBUCION F DE SNEDECOR (19)

GRADOS DE LIBERTAD numerador \rightarrow 19

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.099	0.122	0.169	0.228	0.334	9.567	15.15	27.21	61.66	247.7	991.8	1550	6201
2	0.141	0.169	0.222	0.284	0.384	3.424	4.429	6.101	9.439	19.44	39.44	49.44	99.43
3	0.169	0.200	0.256	0.320	0.417	2.459	2.983	3.779	5.187	8.667	14.18	16.57	26.72
4	0.190	0.222	0.281	0.345	0.441	2.083	2.446	2.973	3.849	5.811	8.575	9.688	14.05
5	0.206	0.240	0.300	0.365	0.460	1.882	2.167	2.569	3.212	4.568	6.344	7.028	9.580
6	0.219	0.254	0.315	0.380	0.474	1.758	1.997	2.327	2.842	3.884	5.184	5.669	7.422
7	0.230	0.266	0.328	0.393	0.486	1.672	1.882	2.166	2.601	3.455	4.483	4.857	6.181
8	0.239	0.275	0.338	0.404	0.496	1.610	1.798	2.051	2.431	3.161	4.016	4.322	5.384
9	0.247	0.284	0.347	0.413	0.504	1.563	1.735	1.964	2.305	2.948	3.683	3.943	4.833
10	0.254	0.291	0.355	0.421	0.511	1.525	1.685	1.897	2.208	2.785	3.435	3.662	4.430
11	0.260	0.298	0.362	0.427	0.518	1.495	1.645	1.842	2.130	2.658	3.243	3.445	4.123
12	0.266	0.303	0.368	0.433	0.523	1.470	1.612	1.798	2.067	2.555	3.090	3.273	3.883
13	0.271	0.308	0.373	0.439	0.528	1.449	1.584	1.761	2.014	2.471	2.965	3.133	3.689
14	0.275	0.313	0.378	0.443	0.532	1.431	1.561	1.729	1.970	2.400	2.861	3.017	3.529
15	0.279	0.317	0.382	0.448	0.536	1.415	1.540	1.702	1.932	2.340	2.773	2.919	3.396
16	0.282	0.321	0.386	0.451	0.540	1.401	1.523	1.678	1.899	2.288	2.698	2.836	3.283
17	0.286	0.324	0.390	0.455	0.543	1.389	1.507	1.657	1.870	2.243	2.633	2.764	3.186
18	0.289	0.327	0.393	0.458	0.546	1.379	1.493	1.639	1.845	2.203	2.576	2.701	3.101
19	0.291	0.330	0.396	0.461	0.549	1.369	1.481	1.623	1.822	2.168	2.526	2.645	3.027
20	0.294	0.333	0.399	0.464	0.551	1.361	1.470	1.608	1.802	2.137	2.482	2.596	2.962
21											2.442		
22	0.299	0.338	0.404	0.469	0.556	1.346	1.450	1.583	1.768	2.084	2.407	2.513	2.852
23	0.301	0.340	0.406	0.471	0.558	1.339	1.442	1.572	1.753	2.061	2.374	2.477	2.805
24	0.302	0.342	0.408	0.473	0.560	1.333	1.434	1.562	1.739	2.040	2.345	2.445	2.762
25	0.304	0.344	0.410	0.475	0.561	1.328	1.427	1.553	1.726	2.021	2.318	2.416	2.724
26	0.306	0.346	0.412	0.477	0.563	1.323	1.421	1.544	1.715	2.003	2.294	2.389	2.688
27	0.308	0.347	0.413	0.478	0.564	1.318	1.415	1.536	1.704	1.987	2.271	2.364	2.656
28	0.309	0.349	0.415	0.480	0.566	1.314	1.409	1.529	1.694	1.972	2.251	2.341	2.626
29	0.310	0.350	0.416	0.481	0.567						2.231		
30					0.568						2.213		
35											2.140		
40											2.086		
45		0.366			0.582		1.353		1.594			2.116	
50	0.329	0.369	0.436	0.500	0.584			1.443		1.798		2.080	
55					0.587						1.986		
60											1.964		
65											1.945		
70											1.929		
75											1.916		
80											1.904		
85											1.893		
90											1.884		
95											1.876		
100											1.868		
200											1.798		
500	0.357	0.398	0.465	0.529	0.010	1.202	1.267	1.344	1.446	1.007	1.757	1.803	1.942

GRADOS DE LIBERTAD numerador $\rightarrow 20$

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.101	0.124	0.170	0.230	0.336	9.581	15.17	27.24	61.74	248.0	993.1	1552	6209
2	0.143	0.171	0.224	0.286	0.386	3.426	4.432	6.103		19.45	39.45	49.44	99.43
3		0.203	0.259	0.323	0.420	2.460	2.983 2.445	3.778	5.184		14.17	16.55	26.69
4 5		0.226 0.244	0.285 0.304	0.349 0.369	0.445 0.463		2.445	2.970 2.566	3.844 3.207		8.560 6.329	9.670 7.009	14.02 9.553
6		0.244 0.258	0.304 0.320	0.385	0.403 0.478	1.757	1.995	2.324	2.836	3.874	5.168	5.651	7.396
7	0.235	0.270	0.333	0.398	0.490	1.671		2.162		3.445	4.467	4.839	6.155
8	0.245	0.281	0.343	0.409	0.500	1.609	1.796	2.047	2.425	3.150	3.999	4.304	5.359
9	0.253	0.289	0.353	0.418	0.509	1.561	1.732	1.960	2.298	2.936	3.667	3.925	4.808
10	0.260	0.297	0.361	0.426	0.516	1.523	1.682	1.892	2.201	2.774	3.419	3.644	4.405
11	0.266	0.304	0.368	0.433	0.523	1.493	1.642	1.838	2.123	2.646	3.226	3.427	4.099
12	0.272	0.309	0.374	0.439	0.528	1.468	1.609	1.793	2.060	2.544	3.073	3.254	3.858
13	0.277	0.315	0.379	0.445	0.533	1.447	1.581	1.756	2.007	2.459		3.114	
14	0.281	0.320	0.384	0.449	0.538	1.428	1.557		1.962	2.388	2.844	2.998	3.505
15	0.286	0.324	0.389	0.454	0.542	1.413	1.537	1.697		2.328	2.756	2.900	3.372
16 17	0.289 0.293	0.328 0.331	0.393 0.396	0.458 0.462	0.546 0.549	1.399 1.387	1.519 1.503	1.673 1.652	1.891 1.862	2.276	2.681 2.616	2.817 2.745	3.259 3.162
18	0.293	0.335	0.400	0.462 0.465	0.549 0.552	1.376	1.489			2.191	2.559	2.682	3.077
19	0.299	0.338	0.403	0.468	0.555	1.367	1.477	1.617		2.155	2.509	2.626	3.003
20	0.301	0.340	0.406	0.471	0.557	1.358	1.466	1.602	1.794	2.124	2.464	2.577	2.938
21	0.304	0.343	0.408	0.473	0.560	1.350	1.455	1.589	1.776	2.096	2.425	2.533	2.880
22	0.306	0.345	0.411	0.476	0.562	1.343	1.446	1.577	1.759	2.071	2.389	2.494	2.827
23	0.308	0.348	0.413	0.478	0.564	1.337	1.438	1.566	1.744	2.048	2.357	2.458	2.781
24	0.310	0.350	0.415	0.480	0.566	1.331	1.430	1.556	1.730	2.027	2.327	2.426	2.738
25		0.352	0.417	0.482	0.568	1.325	1.423	1.547	1.718	2.007		2.396	2.699
26		0.354	0.419		0.570		1.417	1.538	1.706	1.990		2.369	2.664
27 28	0.316 0.317	0.355	0.421 0.423	0.486	0.571 0.573	1.315 1.311	1.411 1.405	1.530 1.523	1.695 1.685	1.974 1.959	2.253 2.232	2.344 2.321	2.632 2.602
29	0.317	0.357 0.358	0.423 0.424	0.487 0.489	0.574	1.307	1.400	1.516	1.676	1.945	2.232	2.321	2.574
30	0.320	0.360	0.426	0.490	0.575	1.303	1.395	1.510	1.667	1.932	2.195	2.281	2.549
35	0.326	0.366	0.432	0.497	0.581		1.375	1.483	1.632	1.878		2.200	2.445
40	0.331	0.371	0.437	0.502	0.585	1.276	1.360	1.464	1.605	1.839	2.068	2.141	2.369
45	0.335	0.375	0.441	0.505	0.589	1.267	1.348	1.448	1.585	1.808	2.026	2.096	2.311
50	0.338	0.378	0.445	0.509	0.592	1.259	1.338	1.436	1.568	1.784	1.993	2.060	2.265
55	0.341	0.381	0.447	0.511	0.594	1.253	1.331	1.426	1.555	1.764	1.967	2.031	2.228
60	0.343	0.383	0.450		0.596		1.324	1.418	1.543	1.748		2.007	2.198
65	0.345	0.386	0.452		0.598			1.411	1.534	1.734	1.926	1.986	2.172
70 75	0.347	0.387		0.518				1.404				1.969	
75 80								1.399 1.395					
85								1.391					
90								1.387					
95								1.384					
100	0.354	0.394	0.461	0.525	0.606	1.226	1.295	1.381	1.494	1.676	1.849	1.902	2.067
200	0.362	0.403	0.470	0.533	0.614	1.209	1.274	1.353	1.458	1.623	1.778	1.826	1.971
500	0.368	0.409	0.476	0.539	0.619	1.198	1.261	1.336	1.435	1.592	1.736	1.781	1.915

GRADOS DE LIBERTAD numerador $\rightarrow 25$

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.106	0.129	0.176	0.236	0.343	9.634	15.25	27.39	62.05	249.3	998.1	1560	6240
2	0.152	0.180	0.233	0.295	0.396	3.436	4.441	6.113	9.451	19.46	39.46	49.45	99.44
3		0.214			0.432				5.175			16.49	26.58
4		0.239	0.298		0.458					5.769		9.601	13.91
5		0.259		0.384			2.160				6.268		
6		0.276	0.337	0.402		1.753	1.988			3.835	5.107	5.581	7.296
7		0.289	0.351			1.667		2.148			4.405		
8	0.265	0.301	0.363	0.428	0.518	1.603		2.031		3.108	3.937	4.233	5.263
9 10	0.274	0.311 0.320	0.374		0.528 0.536	1.555 1.517			2.272 2.174			3.854	
11		0.320 0.327			0.543	1.486			2.174		3.355	3.573 3.355	4.311 4.005
12		0.334		0.462		1.460			2.031			3.183	3.765
13	0.303	0.340		0.468	0.555	1.438	1.568	1.736				3.042	3.571
14		0.346		0.474		1.420		1.704		2.341		2.926	3.412
15				0.479					1.894			2.827	3.278
16		0.355		0.483	0.569	1.390				2.227	2.614		3.165
17	0.321	0.360	0.424	0.487		1.377	1.488	1.630	1.831	2.181	2.548	2.671	3.068
18	0.325	0.364	0.428	0.491	0.576	1.366	1.474	1.611	1.805	2.141	2.491	2.608	2.983
19	0.329	0.367	0.431	0.495	0.579	1.356	1.461	1.595	1.782	2.106	2.441	2.552	2.909
20	0.332	0.370	0.435	0.498	0.582	1.348	1.450	1.580	1.761	2.074	2.396	2.502	2.843
21	0.335	0.374	0.438	0.501	0.585	1.340	1.439	1.566	1.742	2.045	2.356	2.458	2.785
22	0.338	0.376	0.441	0.504	0.588	1.332	1.430	1.554	1.726	2.020	2.320	2.418	2.733
23	0.340	0.379	0.443	0.507	0.590	1.326	1.421	1.542	1.710	1.996	2.287	2.382	2.686
24	0.343	0.382	0.446	0.509	0.592	1.319	1.413	1.532	1.696	1.975	2.257	2.350	2.643
25	0.345	0.384			0.594	1.314	1.406	1.522	1.683	1.955	2.230	2.320	2.604
26	0.347	0.386		0.514		1.309	1.399	1.514	1.671	1.938	2.205	2.293	2.569
27	0.349	0.388	0.453	0.516		1.304	1.393	1.505	1.660	1.921	2.183	2.268	2.536
28	0.351	0.390	0.455		0.600	1.299	1.387	1.498	1.650		2.161		
29	0.353	0.392									2.142		
30	0.355	0.394				1.291		1.484			2.124		
35 40	0.362		0.466	0.528	0.609	1.275		1.457	1.595		2.049		
45	0.368 0.373	0.408		0.534 0.539	0.619	1.263 1.253	1.340 1.328	1.437 1.421	1.568 1.546		1.994 1.952		
50	0.373	0.415 0.417	0.481		0.622	1.245	1.318	1.421	1.529	1.727	1.919	1.979	
55	0.380	0.420		0.546		1.239		1.398	1.515	1.707	1.891	1.950	2.129
60	0.383	0.423	0.487	0.549	0.628	1.234	1.303	1.389	1.504	1.690	1.869	1.925	2.098
65	0.386	0.426	0.490	0.551		1.229			1.494		1.850	1.904	
70	0.388	0.428							1.486	1.664	1.833	1.887	2.050
75	0.390	0.430	0.494	0.555	0.633	1.222	1.288	1.370	1.478	1.653	1.819	1.872	2.031
80	0.392	0.432	0.496	0.557	0.635	1.219	1.285	1.365	1.472	1.644	1.807	1.858	2.015
85	0.393	0.433	0.497	0.558	0.636	1.216	1.281	1.361	1.466	1.636	1.796	1.847	2.000
90	0.395	0.434	0.499	0.560	0.637	1.214	1.278	1.357	1.461	1.629	1.787	1.836	1.987
95	0.396	0.436	0.500	0.561	0.638	1.212	1.276	1.353	1.457	1.622	1.778	1.827	1.976
100											1.770		
200	0.408	0.448	0.512	0.573	0.649	1.192	1.250	1.321	1.414	1.561	1.698	1.740	1.868
500	0.416	0.456	0.520	0.580	0.655	1.181	1.236	1.303	1.391	1.528	1.655	1.694	1.810

GRADOS DE LIBERTAD numerador $\rightarrow 30$

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.109	0.132	0.180	0.240	0.347	9.670	15.31	27.48	62.26	250.1	1001	1565	6261
2	0.157	0.186	0.239		0.402					19.46	39.46	49.46	99.45
3		0.222	0.279		0.439			3.772			14.08	16.45	26.50
4		0.249	0.308		0.467		2.439			5.746	8.461		13.84 9.379
5 6	0.237 0.253	0.270 0.288	0.330 0.349	0.395 0.413	0.488 0.505	1.751	2.156	2.348	3.174 2.800	3.808	5.065		9.579 7.229
7				0.418				2.138		3.376		4.722	
8	0.279	0.315	0.377	0.441				2.020		3.079	3.894		5.198
9	0.290	0.326	0.388	0.452	0.541			1.932		2.864	3.560	3.806	4.649
10	0.299	0.336	0.398	0.462	0.550	1.512	1.663	1.862	2.155	2.700	3.311	3.525	4.247
11	0.307	0.344	0.407	0.470	0.557	1.481	1.622	1.806	2.076	2.570	3.118	3.307	3.941
12	0.315	0.352	0.415	0.478	0.564	1.454	1.587	1.761	2.011	2.466	2.963	3.134	3.701
13	0.321	0.359	0.422	0.485	0.570	1.432	1.558	1.722	1.958	2.380	2.837	2.993	3.507
14	0.327	0.365	0.428	0.491	0.576			1.689		2.308	2.732		3.348
15	0.333	0.370	0.433	0.496	0.581		1.513	1.661		2.247	2.644		3.214
16	0.338	0.375	0.439		0.585		1.494	1.637		2.194		2.693	3.101
17 18		0.380 0.385	0.443 0.448	0.506 0.510	0.589	1.370 1.359	1.478	1.615 1.596	1.809 1.783	2.148 2.107		2.620 2.557	3.003 2.919
19	0.351	0.389	0.440 0.452		0.595	1.349	1.450	1.579	1.759	2.107	2.394		2.844
20	0.354	0.392	0.456	0.514	0.600	1.340	1.439	1.563	1.738	2.039	2.349	2.451	2.778
21		0.396	0.459		0.603	1.332		1.550	1.719		2.308		2.720
22	0.361	0.399	0.462	0.524	0.606	1.324	1.418	1.537	1.702	1.984	2.272	2.366	2.667
23	0.364	0.402	0.465	0.527	0.608	1.318	1.410	1.525	1.686	1.961	2.239	2.330	2.620
24	0.367	0.405	0.468	0.530	0.611	1.311	1.401	1.515	1.672	1.939	2.209	2.297	2.577
25	0.369	0.408	0.471	0.532	0.613	1.306	1.394	1.505	1.659	1.919	2.182	2.267	2.538
26		0.410			0.615	1.300		1.496	1.647		2.157		2.503
27		0.413		0.537	0.617		1.381	1.488	1.636			2.214	
28		0.415	0.478	0.539	0.619	1.291	1.375	1.480	1.625	1.869	2.112		2.440
29 30	0.379	0.417 0.419	0.480 0.482	0.541 0.543	0.621 0.622	1.286	1.369 1.364	1.473 1.466	1.616 1.606	1.854	2.092 2.074		2.412 2.386
35	0.389	0.419	0.482		0.630		1.343			1.786	1.999		2.281
40		0.435	0.498	0.558	0.636		1.326	1.418			1.943		
45		0.441	0.503	0.563	0.640		1.314		1.519	1.713		1.960	2.144
50	0.407	0.445	0.508	0.568	0.644	1.235	1.304	1.388	1.502	1.687	1.866	1.923	2.098
55	0.411	0.449	0.512	0.572	0.648	1.228	1.295	1.377	1.487	1.666	1.838	1.893	2.060
60	0.414	0.453	0.515	0.575	0.650	1.223	1.288	1.368	1.476	1.649	1.815	1.868	2.028
65	0.417	0.456	0.518	0.578	0.653	1.218	1.282	1.361	1.465	1.635	1.796	1.847	2.002
70					0.655						1.779		1.980
75													
200					0.675								
500					0.682								
65 70 75 80 85 90 95 100 200	0.417 0.420 0.422 0.424 0.426 0.428 0.429 0.430 0.444	$\begin{array}{c} 0.456 \\ 0.459 \\ 0.461 \\ 0.463 \\ 0.465 \\ 0.466 \\ 0.468 \\ 0.469 \\ 0.483 \end{array}$	0.518 0.521 0.523 0.525 0.527 0.529 0.530 0.531 0.545	0.578 0.580 0.582 0.584 0.586 0.587 0.589 0.590 0.603	0.653 0.655 0.657 0.658 0.660 0.661 0.663 0.664 0.675	1.218 1.214 1.211 1.208 1.205 1.202 1.200 1.198 1.179	1.282 1.277 1.273 1.269 1.265 1.262 1.259 1.257 1.233	1.361 1.354 1.348 1.343 1.339 1.335 1.331 1.328 1.298	1.465 1.457 1.449 1.443 1.437 1.432 1.427 1.423 1.383	1.635 1.622 1.611 1.602 1.593 1.586 1.579 1.573 1.516	1.796 1.779 1.765 1.752 1.741 1.731 1.723 1.715 1.640	1.847 1.829 1.813 1.800 1.788 1.777 1.768 1.759 1.679	2.002 1.980 1.960 1.944 1.929 1.916 1.904 1.893 1.794

DISTRIBUCION F DE SNEDECOR (23)

GRADOS DE LIBERTAD numerador $\rightarrow 35$

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.111	0.135	0.182	0.243	0.350	9.695	15.34	27.55	62.42	250.7	1004	1569	6276
2	0.162	0.190	0.244	0.306	0.406	3.448	4.453	6.125	9.463	19.47	39.47	49.47	99.45
3		0.227		0.348		2.466		3.771	5.163		14.06	16.42	26.45
4		0.256	0.315			2.082				5.729	8.433	9.521	13.79
5		0.278		0.402				2.542		4.478	6.197		9.329
6		0.297	0.358		0.513	1.749	1.979		2.789	3.789	5.035	5.500	7.180
7		0.313		0.438		1.661			2.544			4.688	5.944
8	0.290	0.326	0.387	0.451	0.540	1.597		2.012		3.059	3.863	4.151	5.151
9	0.301	0.337 0.348	0.399	0.463	0.550 0.560	1.547 1.508		1.923	2.242	2.678	3.529	3.772	4.602 4.200
10 11	0.311	0.346 0.357	0.410	0.473 0.482	0.568	1.477			2.142		3.279 3.086	3.490 3.272	3.895
12	0.328	0.365			0.575	1.450			1.997			3.098	3.654
13	0.335	0.372	0.435	0.490 0.497	0.581	1.428		1.712	1.943	2.357	2.805	2.957	3.461
14		0.379	0.441	0.504		1.409	1.527	1.679	1.897			2.840	3.301
15	0.348	0.385	0.447	0.509		1.392	1.505			2.223		2.741	3.167
16	0.353	0.391	0.453			1.378	1.487	1.626		2.169	2.534	2.656	3.054
17	0.358	0.396	0.458	0.520	0.602	1.365	1.470		1.793	2.123	2.468	2.583	2.956
18	0.363	0.401	0.463	0.524		1.354			1.766				2.871
19	0.367	0.405	0.467	0.528	0.609	1.344	1.442	1.567	1.743	2.046	2.359	2.463	2.797
20	0.371	0.409	0.471	0.532	0.613	1.335	1.430	1.552	1.721	2.013	2.314	2.413	2.731
21	0.375	0.413	0.475	0.536	0.616	1.326	1.419	1.538	1.702	1.984	2.273	2.368	2.672
22	0.379	0.416	0.479	0.539	0.619	1.319	1.410	1.525	1.685	1.958	2.237	2.328	2.620
23	0.382	0.420	0.482	0.543	0.622	1.312	1.401	1.513	1.669	1.934	2.204	2.292	2.572
24	0.385	0.423	0.485	0.545	0.624	1.305	1.392	1.502	1.654	1.912	2.173	2.259	2.529
25	0.388	0.426	0.488	0.548	0.627	1.299	1.385	1.492	1.641	1.892	2.146	2.228	2.490
26	0.391	0.429	0.491	0.551	0.629	1.294	1.378		1.629	1.874	2.120		2.454
27	0.393	0.431	0.493	0.553	0.631	1.289	1.371	1.475	1.617	1.857	2.097	2.175	2.421
28	0.396	0.434	0.496	0.556		1.284		1.467	1.607		2.076		
29		0.436	0.498		0.635			1.460		1.827		2.130	
30	0.401	0.438	0.500	0.560	0.637	1.276	1.354		1.588		2.037		
35 40	0.410	0.448	0.510	0.569	0.645	1.258	1.332		1.550	1.757	1.961	2.027	
40		0.456 0.462	0.518	0.576		1.245 1.235	1.316	1.386	1.521	1.715		1.965 1.918	2.153
45 50	0.424	0.468	0.524 0.529	0.582 0.587	0.657 0.661	1.235	1.303 1.292	1.373	1.499 1.481	1.683 1.657	1.861 1.827	1.881	2.046
55		0.400 0.472	0.533	0.591	0.665	1.220			1.466	1.636	1.799	1.850	2.008
60	0.438	0.476	0.537	0.595	0.668	1.215	1.277	1.353	1.454	1.618	1.775	1.825	1.976
65	0.442	0.480	0.541	0.598	0.670	1.210		1.345		1.603	1.755	1.803	1.950
70											1.739		
75											1.724		
80											1.711		
85	0.452	0.490	0.550	0.607	0.678	1.196	1.253	1.322	1.414	1.561	1.700	1.743	1.875
90	0.454	0.492	0.552	0.609	0.680	1.194	1.250	1.318	1.409	1.554	1.690	1.733	1.862
95	0.455	0.493	0.554	0.610	0.681	1.191	1.247	1.314	1.404	1.547	1.681	1.723	1.850
100	0.457	0.495	0.555	0.612	0.682	1.189	1.244	1.311	1.400	1.541	1.673	1.714	1.839
200	0.473	0.511	0.571	0.626	0.695	1.170	1.219	1.279	1.358	1.482	1.597	1.632	1.738
500	0.484	0.521	0.581	0.635	0.703	1.157	1.204	1.260	1.333	1.447	1.551	1.583	1.678

GRADOS DE LIBERTAD numerador $\rightarrow 40$

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.113	0.137	0.184	0.245	0.353	9.714	15.37	27.60	62.53	251.1	1006	1571	6287
2	0.165	0.193	0.247	0.309	0.410	3.451	4.456	6.128	9.466	19.47	39.47	49.47	99.46
3	0.201	0.232	0.289		0.449	2.467	2.984	3.770		8.594		16.39	26.41
4	0.229	0.261	0.320		0.478			2.950 2.538		5.717	8.411	9.495	13.75
5 6	0.251 0.269	0.285 0.304	0.344 0.364	0.408 0.428	0.501 0.519	1.876 1.748	1.976	2.338	3.157 2.781	4.464 3.774	6.175 5.012	6.833 5.474	9.291 7.143
7	0.285	0.320	0.381	0.445	0.534	1.659	1.857		2.535	3.340	4.309	4.662	5.908
8	0.299	0.334	0.395	0.459	0.547	1.595	1.770	2.006	2.361	3.043	3.840	4.125	5.116
9	0.310	0.346	0.408	0.471	0.558	1.545	1.704	1.917	2.232	2.826	3.505	3.745	4.567
10	0.321	0.357	0.419	0.481	0.567	1.506	1.653	1.846	2.132	2.661	3.255	3.463	4.165
11	0.330	0.367	0.428	0.491	0.576	1.474	1.611	1.790	2.052	2.531	3.061	3.245	3.860
12	0.339	0.375	0.437	0.499	0.583	1.447	1.576	1.743	1.986	2.426	2.906	3.071	3.619
13	0.346	0.383	0.445	0.507	0.590	1.425	1.546	1.704	1.931	2.339	2.780	2.930	3.425
14	0.353	0.390	0.452	0.513	0.596	1.405	1.521	1.671	1.885	2.266	2.674	2.812	3.266
15	0.360	0.397	0.458	0.520	0.602	1.389	1.500	1.642	1.845		2.585	2.713	3.132
16	0.365	0.403	0.464	0.525	0.607		1.481	1.617	1.811			2.628	3.018
17 18	0.371 0.376	0.408 0.413	0.470 0.475	0.530 0.535	0.611 0.615	1.361 1.350	1.464 1.449	1.595 1.576	1.781 1.754		2.442 2.384	2.555	2.920 2.835
19	0.370	0.418	0.479	0.540	0.619	1.339	1.436	1.558	1.734	2.003	2.333	2.434	2.761
20	0.385	0.422	0.484	0.544	0.623	1.330	1.424	1.542	1.708	1.994	2.287	2.384	2.695
21	0.389	0.426	0.488	0.548	0.626		1.413	1.528	1.689	1.965		2.339	2.636
22	0.393	0.430	0.491	0.551	0.630	1.314	1.403	1.515	1.671	1.938	2.210	2.299	2.583
23	0.396	0.434	0.495	0.555	0.633	1.307	1.394	1.503	1.655	1.914	2.176	2.262	2.535
24	0.400	0.437	0.498	0.558	0.635	1.300	1.385	1.493	1.641	1.892	2.146	2.229	2.492
25	0.403	0.440	0.501	0.561	0.638	1.294	1.378	1.483	1.627	1.872	2.118	2.199	2.453
26	0.406	0.443	0.504	0.564	0.640		1.371	1.473	1.615	1.853		2.171	2.417
27	0.409	0.446	0.507	0.566	0.643	1.284	1.364	1.465	1.603	1.836		2.145	2.384
28	0.411	0.449	0.510	0.569	0.645	1.279	1.358	1.457	1.592	1.820	2.048	2.121	2.354
29	0.414	0.451	0.512	0.571	0.647	1.275	1.352	1.449	1.583	1.806	2.028	2.099	2.325
$\frac{30}{35}$	0.416 0.427	0.454 0.464	0.515 0.525	0.573 0.583	0.649 0.657	1.270 1.253	1.347	1.442 1.414	1.573 1.535	1.792 1.735	2.009 1.932	2.079 1.995	2.299 2.193
40		0.473	0.533		0.664		1.308	1.392	1.506	1.693	1.875	1.933	2.114
45	0.443	0.480	0.540	0.597	0.670	1.229	1.294	1.375	1.483	1.660	1.831	1.886	2.054
50	0.449	0.486	0.546	0.602	0.674	1.221	1.284	1.361	1.465	1.634	1.796	1.848	2.007
55	0.454	0.491	0.551	0.607	0.678	1.214	1.275	1.350	1.450	1.612	1.768	1.817	1.968
60	0.458	0.495	0.555	0.611	0.682	1.208	1.267	1.340	1.437	1.594	1.744	1.791	1.936
65	0.462	0.499	0.558	0.614	0.685	1.203	1.261	1.332	1.427	1.579	1.724	1.770	1.909
70		0.502			0.687						1.707		1.886
75					0.689								
80					0.691								
85 00					0.693								
90 95					0.695 0.696								
100					0.698								
200					0.711								1.694
500					0.720								
	ı												

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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.116	0.139	0.187	0.248	0.356	9.741	15.42	27.67	62.69	251.8	1008	1575	6303
2	0.169	0.198	0.252	0.314	0.415	3.456	4.461	6.133	9.471	19.48	39.48	49.47	99.46
3	0.207	0.238	0.295		0.455	2.469	2.984		5.155		14.01	16.36	26.35
4	0.236	0.269		0.391			2.434		3.795	5.699		9.460	13.69
5	0.260			0.417							6.144		9.238
6		0.314			0.528	1.746		2.284		3.754		5.438	7.091
7	0.296		0.392		0.543	1.657		2.117			4.276		5.858
8	0.311	0.346	0.407	0.470	0.557	1.591	1.765	1.998		3.020	3.807	4.088	5.065
9	0.323	0.359 0.371	0.420	0.482 0.494		1.541 1.502	1.698 1.646	1.907		2.803 2.637	3.472 3.221	3.708	4.517
10 11	0.335 0.345			0.494					2.117			3.425 3.207	4.115 3.810
12	0.354	0.390		0.504 0.512								3.033	
13	0.362	0.399	0.460	0.520			1.539	1.693	1.915		2.744		3.375
14		0.406	0.467	0.528		1.400	1.513					2.773	3.215
15		0.413		0.534		1.383	1.491	1.631		2.178		2.674	
16	0.383	0.420		0.540		1.369		1.605		2.124		2.589	2.967
17	0.389	0.426	0.486	0.546	0.625	1.355	1.455	1.583	1.763	2.077	2.405	2.515	2.869
18	0.395	0.431	0.492	0.551	0.630	1.344	1.440	1.563	1.736	2.035	2.347	2.450	2.784
19	0.400	0.437	0.497	0.556	0.634	1.333	1.427	1.545	1.711	1.999	2.295	2.394	2.709
20	0.405	0.441	0.502	0.560	0.638	1.324	1.414	1.529	1.690	1.966	2.249	2.343	2.643
21	0.409	0.446	0.506	0.565	0.641	1.315	1.403	1.515	1.670	1.936	2.208	2.298	2.584
22	0.414	0.450	0.510	0.569	0.645	1.307	1.393	1.501	1.652	1.909	2.171	2.257	2.531
23	0.418	0.454	0.514	0.572	0.648	1.300	1.384	1.489	1.636	1.885	2.137	2.220	2.483
24	0.421	0.458	0.518	0.576	0.651	1.293	1.375	1.478	1.621	1.863	2.107	2.187	2.440
25	0.425	0.462	0.521	0.579	0.654	1.287	1.367	1.468	1.607	1.842	2.079	2.156	2.400
26	0.428	0.465	0.524	0.582	0.657	1.282	1.360	1.459		1.823		2.128	
27	0.432	0.468	0.528	0.585	0.659	1.276	1.353	1.450	1.583	1.806	2.029	2.102	
28	0.435	0.471	0.530	0.588		1.271	1.347	1.442	1.572	1.790	2.007	2.078	
29	0.437		0.533		0.664		1.341				1.987	2.056	
30	0.440	0.477		0.593		1.263		1.427		1.761	1.968	2.035	
35 40	0.452	0.489	0.547	0.603	0.675	1.245		1.398	1.513	1.703	1.890	1.950	
45	0.462 0.470	0.498 0.506	0.557	0.612 0.619	0.689	1.231 1.220	1.295 1.282	1.375 1.358	1.483 1.460	1.660 1.626	1.832 1.788	1.887 1.839	1.997
50	0.477	0.513	0.504		0.694		1.271	1.343	1.441	1.599	1.752	1.800	1.949
55	0.483	0.519	0.576	0.630	0.698	1.204		1.332		1.577	1.723	1.769	1.910
60	0.488	0.524	0.581	0.635				1.322	1.413	1.559	1.699	1.743	1.877
65	0.492	0.528	0.585				1.247			1.543	1.678	1.720	1.850
70	0.496	0.532		0.642						1.530	1.660		
75	0.500	0.535	0.592	0.645	0.711	1.185	1.237	1.300	1.384	1.518	1.645	1.685	1.806
80	0.503	0.538	0.595	0.647	0.713	1.181	1.232	1.294	1.377	1.508	1.632	1.671	1.788
85	0.506	0.541	0.597	0.650	0.715	1.178	1.228	1.289	1.370	1.499	1.620	1.658	1.773
90	0.508	0.544	0.600	0.652	0.717	1.176	1.225	1.285	1.365	1.491	1.610	1.647	1.759
95	0.510	0.546	0.602	0.654	0.719	1.173	1.222	1.281	1.359	1.484	1.600	1.636	1.746
100											1.592		
200											1.511		
500	0.549	0.584	0.637	0.686	0.746	1.136	1.175	1.222	1.282	1.376	1.462	1.488	1.566

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.118	0.141	0.189	0.250	0.358	9.759	15.44	27.72	62.79	252.2	1010	1578	6313
2	0.173	0.201			0.418	3.459	4.465	6.136			39.48	49.48	99.47
3		0.242			0.459			3.767	5.151		13.99	16.34	26.32
4				0.396				2.942			8.360	9.436 6.773	13.65
5 6	0.266 0.286	0.300 0.321	0.359 0.381		0.514 0.533		1.969		3.140 2.762			5.413	9.202 7.057
7		0.339	0.399	0.462				2.112					5.824
8		0.354		0.477				1.992		3.005	3.784		5.032
9	0.332	0.368	0.428	0.490	0.575	1.539	1.694	1.901	2.208	2.787	3.449	3.683	4.483
10	0.344	0.380	0.440	0.502	0.586	1.499	1.642	1.830	2.107	2.621	3.198	3.400	4.082
11	0.355	0.391	0.451	0.512	0.595	1.466	1.599	1.773	2.026	2.490	3.004	3.181	3.776
12	0.365	0.401	0.461	0.522	0.603	1.439	1.564	1.725	1.960	2.384	2.848	3.007	3.535
13		0.410			0.611		1.534			2.297	2.720		3.341
14	0.382	0.418	0.478	0.538	0.618	1.397	1.508	1.652		2.223	2.614		3.181
15	0.389	0.425	0.485	0.545	0.624	1.380	1.486	1.622	1.817		2.524		3.047
$\frac{16}{17}$	0.396 0.402	0.432 0.438	0.492 0.498	0.551 0.557	0.629 0.635	1.365 1.351	1.466 1.449	1.597 1.574	1.782	2.100	2.447 2.380	2.301	2.933 2.835
18		0.444	0.504	0.562	0.639		1.434	1.554		2.037	2.321	2.423	2.749
19		0.450	0.509	0.567	0.644	1.329	1.420	1.536	1.699	1.980	2.270	2.366	2.674
20	0.419	0.455	0.514	0.572	0.648	1.319	1.408	1.520	1.677	1.946	2.223	2.315	2.608
21	0.424	0.460	0.519	0.577	0.652	1.311	1.397	1.505	1.657	1.916	2.182	2.269	2.548
22	0.428	0.464	0.523	0.581	0.655	1.303	1.386	1.492	1.639	1.889	2.145	2.228	2.495
23	0.433	0.469	0.528	0.585	0.659	1.295	1.377	1.480	1.622	1.865	2.111	2.191	2.447
24	0.437	0.473	0.531	0.588	0.662		1.368	1.469			2.080		2.403
25	0.441	0.477	0.535		0.665	1.282		1.458			2.052		
26		0.480	0.539		0.668	1.277		1.449	1.581				2.327
27 28	0.448 0.451	0.484 0.487	0.542 0.545	0.598 0.601	0.670 0.673		1.346 1.340	1.440 1.431	1.569 1.558	1.785 1.769	2.002 1.980	2.072 2.048	2.294 2.263
29	0.454	0.490	0.548	0.604		1.262	1.334	1.424	1.547	1.754	1.959	2.026	2.234
30	0.457	0.493	0.551		0.678	1.257	1.328	1.417	1.538	1.740		2.005	2.208
35	0.470	0.506	0.563		0.688	1.239		1.386	1.497	1.681			2.099
40	0.481	0.517	0.573	0.627	0.696	1.225	1.287	1.363	1.467	1.637	1.803	1.856	2.019
45	0.490	0.525	0.582	0.635	0.702	1.214	1.273	1.345	1.443	1.603	1.757	1.806	1.958
50	0.498	0.533	0.589	0.641	0.708	1.205	1.261	1.331	1.424	1.576	1.721	1.767	1.909
55		0.539	0.595		0.713	1.197		1.319		1.553		1.735	1.869
60		0.545	0.600		0.717			1.309	1.395	1.534	1.667	1.709	1.836
65 70		0.549	0.605	0.656 0.660	0.720			1.300	1.384		1.646	1.686	1.808
70 75		0.554		0.663									1.785
80				0.666									
85				0.668									
90				0.671									
95	0.535	0.569	0.623	0.673	0.735	1.165	1.211	1.267	1.340	1.457	1.566	1.600	1.703
100	0.537	0.572	0.625	0.675	0.737	1.163	1.208	1.263	1.336	1.450	1.558	1.591	1.692
200				0.696									
500	0.580	0.612	0.663	0.710	0.766	1.126	1.162	1.205	1.260	1.345	1.423	1.447	1.517

DISTRIBUCION F DE SNEDECOR (27)

GRADOS DE LIBERTAD numerador $\rightarrow 70$

 \downarrow denominador

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.119	0.143	0.191	0.251	0.360	9.772	15.46	27.75	62.87	252.5	1011	1580	6321
2	0.175	0.203	0.257	0.320	0.420	3.462	4.467	6.139	9.477	19.48	39.48	49.48	99.47
3	0.215	0.245			0.462				5.149		13.98	16.32	26.29
4	0.245				0.493					5.679	8.346	9.419	13.63
5					0.518						6.107		9.176
6		0.326			0.538		1.967		2.756	3.730	4.943	5.396	7.032
7					0.554					3.294		4.583	5.799
8	0.325	0.360	0.420	0.482 0.496	0.568	1.588	1.758	1.988	2.333	2.994	3.768	4.046	5.007
9 10	0.339	0.374 0.387	0.434 0.447	0.490		1.537 1.497	1.691 1.639		2.202 2.100	2.610	3.433 3.182	3.665 3.382	4.459 4.058
11	0.362	0.398		0.519				1.768			2.987	3.163	3.752
12	0.302	0.408		0.519		1.437		1.720	1.952			2.988	3.511
13	0.382	0.417	0.477	0.537	0.617	1.414		1.680	1.896			2.846	3.317
14	0.390	0.426	0.486	0.545		1.394		1.646		2.210	2.597	2.727	3.157
15		0.434			0.630		1.482	1.617		2.147	2.506	2.627	3.022
16	0.405	0.441		0.559	0.636	1.362			1.773		2.429	2.542	2.908
17	0.412	0.448	0.507	0.565	0.641	1.348	1.445	1.568	1.742		2.362	2.468	2.810
18	0.418	0.454			0.646	1.336	1.429	1.548	1.714			2.403	2.724
19	0.424	0.460	0.518	0.576	0.651	1.326	1.416	1.530	1.690	1.966	2.251	2.345	2.649
20	0.429	0.465	0.524	0.581	0.655	1.316	1.403	1.513	1.667	1.932	2.205	2.294	2.582
21	0.434	0.470	0.528	0.585	0.659	1.307	1.392	1.499	1.647	1.902	2.163	2.249	2.523
22	0.439	0.475	0.533	0.590	0.663	1.299	1.381	1.485	1.629	1.875	2.125	2.208	2.469
23	0.444	0.479	0.537	0.594	0.667	1.292	1.372	1.473	1.613	1.850	2.091	2.170	2.421
24	0.448	0.484	0.542	0.597	0.670	1.285	1.363	1.461	1.597	1.828	2.060	2.136	2.377
25	0.452	0.488	0.545	0.601	0.673	1.279	1.355	1.451	1.583	1.807	2.032	2.105	2.337
26	0.456	0.492	0.549	0.604	0.676	1.273	1.347	1.441	1.570	1.788	2.006	2.077	2.301
27	0.460	0.495	0.553	0.608	0.679	1.267	1.341	1.432	1.558	1.770	1.982	2.050	2.267
28	0.463	0.499	0.556					1.424		1.754	1.959	2.026	
29	0.467	0.502			0.684					1.738		2.004	
30	0.470	0.505	0.562		0.686	1.253		1.409	1.527	1.724	1.920	1.983	
35	0.484	0.519	0.575	0.629	0.697	1.234	1.299		1.486	1.665	1.840	1.896	
40	0.495	0.530	0.586	0.639	0.705	1.220	1.280	1.355	1.455	1.621		1.832	1.991
45	0.505	0.540	0.595			1.209	1.266	1.337	1.431	1.586	1.735	1.783	1.929
50 55	0.513 0.520	0.548 0.554	0.602	0.654 0.660		1.200 1.192	1.255 1.245	1.322 1.309	1.412 1.396	1.558 1.535	1.698 1.668	1.743 1.710	1.880 1.839
60	0.526	0.560		0.665	0.728	1.186	1.237	1.299	1.382	1.516	1.643	1.683	1.806
65	0.532	0.566	0.619	0.669	0.732		1.230	1.290		1.500	1.622	1.660	1.778
70					0.735								
75					0.738								
80					0.741								
85					0.743								
90					0.745								
95					0.747								
100	0.557	0.590	0.642	0.690	0.749	1.157	1.200	1.252	1.321	1.430	1.532	1.564	1.659
200	0.584	0.617	0.667	0.712	0.768	1.133	1.171	1.215	1.273	1.364	1.447	1.472	1.548
500	0.604	0.635	0.684	0.728	0.781	1.119	1.152	1.191	1.243	1.322	1.394	1.416	1.481

GRADOS DE LIBERTAD numerador $\rightarrow 80$

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.120	0.144	0.192	0.253	0.361	9.782	15.48	27.78	62.93	252.7	1012	1581	6326
2		0.205	0.259		0.422			6.141		19.48	39.48	49.48	99.47
3		0.248			0.464				5.147		13.97	16.31	26.27
4		0.281	0.339		0.496 0.521					5.673	8.335	9.406	13.61
5 6	0.274	0.307 0.329	0.389		0.521 0.541		2.143 1.965		3.132 2.752	3.722	6.096 4.932	5.383	9.157 7.013
7		0.348		0.432 0.470				2.105			4.227	4.570	5.781
8		0.365	0.425		0.572		1.756	1.985		2.986	3.756	4.032	
9	0.344	0.379	0.439	0.500	0.584	1.536	1.689	1.893	2.196	2.768	3.421	3.651	4.441
10	0.357	0.392	0.452	0.512	0.595	1.495	1.636	1.822	2.095	2.601	3.169	3.368	4.039
11	0.368	0.404	0.463	0.523	0.605	1.463	1.593	1.764	2.013	2.469	2.974	3.149	3.734
12	0.379	0.414	0.474	0.533	0.614	1.435	1.557	1.716	1.946	2.363	2.818	2.974	3.493
13	0.388	0.424			0.622	1.412		1.676		2.275		2.831	
14	0.397	0.432			0.629	1.392			1.843		2.583		
15	0.405	0.440	0.499	0.558	0.635		1.479		1.802		2.493		
$\frac{16}{17}$		0.448 0.455	0.507 0.513		0.641 0.647	1.360 1.346	1.459	1.586 1.563	1.766 1.735	2.083 2.035	2.415 2.348	2.527	2.889
18	0.419	0.461	0.519		0.652	1.334		1.543	1.707	1.993		2.388	2.791
19	0.432	0.467	0.525	0.582	0.657		1.412	1.525	1.683	1.955	2.237	2.330	2.630
20	0.437	0.473	0.531	0.587	0.661	1.313	1.399	1.508	1.660	1.922	2.190	2.279	2.563
21	0.443	0.478	0.536	0.592	0.665	1.305	1.388	1.493	1.640	1.891	2.148	2.233	2.503
22	0.448	0.483	0.541	0.596	0.669	1.296	1.377	1.480	1.622	1.864	2.111	2.192	2.450
23	0.453	0.488	0.545	0.601	0.673	1.289	1.368	1.467	1.605	1.839	2.077	2.154	2.401
24	0.457	0.492	0.549	0.605	0.676	1.282	1.359	1.456	1.590	1.816	2.045	2.120	2.357
25	0.461		0.553		0.679			1.445	1.576		2.017		2.317
26	0.465	0.500			0.682	1.270					1.991		2.281
27 28	0.469 0.473	0.504 0.508	0.561 0.564	0.615 0.618	0.685 0.688		1.336 1.330	1.426	1.550 1.539	1.758 1.742		2.034 2.010	
29	0.476	0.508	0.568	0.621	0.691		1.324	1.418 1.410	1.529	1.742		1.987	2.210
30	0.480	0.515	0.571		0.693	1.250		1.403	1.519	1.712	1.904		2.160
35		0.529	0.584		0.704				1.478	1.652	1.824		2.050
40	0.507	0.541	0.596	0.647	0.713	1.217	1.276	1.348	1.447	1.608	1.764	1.814	1.969
45	0.517	0.551	0.605	0.656	0.720	1.205	1.261	1.330	1.422	1.573	1.718	1.764	1.907
50	0.525	0.559	0.613	0.663	0.726	1.196	1.249	1.315	1.402	1.544	1.681	1.724	1.857
55	0.533	0.566	0.620	0.669		1.188		1.302		1.521	1.651	1.691	1.817
60	0.539	0.573	0.626	0.675	0.736	1.182		1.292	1.372	1.502	1.625	1.664	1.783
65	0.545	0.578	0.631		0.740	1.176		1.283	1.360	1.485		1.641	1.754
70 75								1.275			1.585		1.730
75 80								1.268 1.262					
85								1.257					
90								1.252					
95								1.248					
100	0.572	0.604	0.655	0.701	0.759	1.152	1.194	1.244	1.310	1.415	1.512	1.543	1.634
200	0.602	0.633	0.681	0.725	0.779	1.128	1.163	1.205	1.261	1.346	1.425	1.449	1.521
500	0.623	0.654	0.700	0.742	0.793	1.113	1.144	1.181	1.229	1.303	1.370	1.391	1.452

GRADOS DE LIBERTAD numerador $\rightarrow 90$

	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.121	0.144	0.192	0.253	0.362	9.789	15.49	27.80	62.97	252.9	1013	1582	6331
2	0.178	0.206	0.260	0.323	0.423	3.465	4.470	6.142	9.480	19.48	39.48	49.48	99.47
3	0.219	0.250	0.306		0.466		2.984		5.145		13.96	16.30	26.25
4		0.283		0.404				2.937		5.668		9.396	13.59
5				0.432				2.522		4.409	6.087		9.142
6	0.298			0.454			1.964		2.749	3.716	4.923	5.372	6.998
7	0.317	0.352			0.560 0.575			2.103		3.280		4.559	5.766
8 9	0.348	0.368 0.383	0.443	0.489 0.504		1.586 1.535	1.687	1.982		2.761	3.747 3.411	4.022 3.641	4.975
10	0.343	0.396	0.445	0.516		1.494	1.634	1.819		2.701	3.160	3.357	4.025
11	0.373	0.408	0.467	0.527	0.608	1.461	1.591		2.009	2.462	2.964	3.138	3.719
12	0.383	0.419	0.478	0.537	0.617		1.555		1.942			2.963	3.478
13	0.393	0.428	0.487	0.546	0.625		1.525	1.673		2.267		2.820	3.284
14	0.402	0.437		0.555	0.633	1.391		1.638			2.573	2.702	3.124
15	0.410	0.446	0.504	0.562	0.639	1.373	1.476	1.609	1.797	2.130	2.482	2.601	2.989
16	0.418	0.453	0.512	0.569	0.645	1.358	1.456	1.583	1.761	2.075	2.405	2.515	2.875
17	0.425	0.460	0.518	0.576	0.651	1.344	1.439	1.560	1.730	2.027	2.337	2.441	2.776
18	0.432	0.467	0.525	0.582	0.656	1.332	1.423	1.539	1.702	1.985	2.278	2.376	2.690
19	0.438	0.473	0.531	0.587	0.661	1.321	1.409	1.521	1.677	1.947	2.226	2.318	2.614
20	0.444	0.479	0.536	0.592	0.666	1.311	1.396	1.504	1.655	1.913	2.179	2.267	2.548
21	0.449	0.484	0.542	0.597		1.303	1.385	1.489		1.883	2.137	2.221	
22	0.455	0.489	0.547				1.374		1.616			2.179	
23	0.459			0.606		1.287		1.463	1.599	1.830	2.065	2.142	
24	0.464	0.499	0.556	0.610		1.280		1.452	1.584		2.034		
$\frac{25}{26}$	0.469 0.473	0.503		0.614				1.441	1.569	1.787 1.767		2.076 2.048	
27	0.473	0.507			0.690					1.749		2.048	
28	0.481	0.515	0.571			1.257	1.326	1.413		1.733		1.997	
29	0.484	0.519	0.574	0.628	0.696	1.252	1.320	1.405	1.522	1.717	1.911	1.974	
30	0.488	0.522	0.578	0.631	0.699	1.247	1.314	1.398	1.512	1.703	1.892	1.953	2.144
35	0.503	0.537	0.592	0.644	0.710	1.228	1.290	1.367	1.471	1.643	1.811	1.865	2.034
40	0.516	0.549	0.603	0.654	0.719	1.214	1.272	1.343	1.439	1.597	1.751	1.800	1.952
45	0.526	0.560	0.613	0.663	0.726	1.202	1.257	1.324	1.415	1.562	1.705	1.750	1.889
50	0.535	0.569	0.621	0.671	0.733	1.193	1.245	1.309	1.395	1.534	1.667	1.709	1.839
55	0.543	0.576	0.628	0.677	0.738	1.185	1.235	1.296	1.378	1.510	1.636	1.676	1.798
60	0.550	0.583	0.635	0.683	0.743			1.286		1.491	1.611	1.649	1.764
65	0.556	0.589	0.640		0.747		1.220	1.276		1.474	1.589	1.625	1.736
70								1.269				1.605	1.711
75											1.554		
80 85											1.540 1.527		
85 90											1.527		
95											1.505		
100											1.496		
200											1.407		
500											1.351		
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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.121	0.145	0.193	0.254	0.363	9.795	15.50	27.82	63.01	253.0	1013	1583	6334
2	0.179	0.207	0.261		0.424		4.471	6.143	9.481	19.49	39.49	49.48	99.47
3 4	0.220 0.252	0.251 0.285	0.308 0.343		0.467 0.500	2.471	2.984 2.430	3.764 2.936	5.144 3.778	8.554 5.664	13.96 8.319	16.30 9.388	26.24 13.58
5	0.232	0.265	0.343 0.371		0.525		2.430	2.520	3.126	4.405	6.080		9.130
6	0.301	0.335	0.394	0.456	0.545	1.741	1.963	2.269	2.746	3.712	4.915	5.364	
7	0.320	0.354	0.414		0.563	1.651		2.101		3.275	4.210	4.551	5.755
8	0.336	0.371	0.431	0.492	0.577	1.585	1.753	1.980	2.321	2.975	3.739	4.013	4.963
9	0.351	0.386	0.446	0.506	0.590	1.534	1.686	1.888	2.189	2.756	3.403	3.632	4.415
10	0.364	0.399	0.459	0.519	0.601	1.493	1.633	1.817	2.087	2.588	3.152	3.348	4.014
11	0.376	0.411	0.471	0.530	0.611	1.460	1.589	1.758	2.005	2.457	2.956	3.129	3.708
12	0.387	0.422	0.481	0.540	0.620	1.433	1.553	1.710	1.938	2.350	2.800	2.954	3.467
13	0.397	0.432	0.491	0.550	0.628	1.409	1.523	1.670	1.882	2.261		2.811	
14	0.406	0.441	0.500	0.558	0.636	1.389	1.497	1.636		2.187	2.565	2.692	3.112
15	0.415	0.450	0.508	0.566	0.642	1.372	1.474	1.606	1.793	2.123		2.592	
16 17	0.423 0.430	0.458 0.465	0.516 0.523	0.573 0.579	0.649 0.654	1.356 1.343	1.454 1.437	1.580 1.557	1.757 1.726	2.068 2.020	2.396 2.329	2.506 2.431	2.863 2.764
18	0.437	0.403 0.472	0.529	0.586	0.660	1.331	1.421	1.536	1.698	1.978	2.269	2.366	2.678
19	0.443	0.478	0.535	0.591	0.665	1.320	1.407	1.518	1.673	1.940	2.217	2.308	2.602
20	0.449	0.484	0.541	0.597	0.669	1.310	1.394	1.501	1.650	1.907	2.170	2.257	2.535
21	0.455	0.489	0.546	0.601	0.674	1.301	1.383	1.486	1.630	1.876	2.128	2.211	2.475
22	0.460	0.495	0.551	0.606	0.678	1.293	1.372	1.472	1.611	1.849	2.090	2.169	2.422
23	0.465	0.500	0.556	0.611	0.681	1.285	1.362	1.460	1.594	1.823	2.056	2.132	2.373
24	0.470	0.504	0.561	0.615	0.685	1.278	1.353	1.448	1.579	1.800		2.097	2.329
25		0.509	0.565	0.619	0.688		1.345	1.437	1.565	1.779			2.289
26	0.479	0.513	0.569		0.692		1.337	1.427	1.551	1.760		2.037	
27	0.483	0.517	0.573	0.626	0.695	1.260	1.330	1.418	1.539	1.742	1.945	2.011	
$\frac{28}{29}$	0.487 0.491	0.521 0.525	0.576 0.580	0.629 0.633	0.698 0.700	1.255 1.250	1.324 1.317	1.410 1.402	1.528 1.517	1.725 1.710	1.922 1.901	1.986 1.963	2.187 2.158
30		0.528	0.583	0.636	0.703	1.245	1.312		1.507	1.695	1.882	1.942	
35		0.544	0.598	0.649			1.287	1.363	1.465	1.635	1.801	1.854	
40	0.523	0.556	0.610	0.660		1.212		1.339	1.434	1.589		1.789	1.938
45	0.534	0.567	0.620	0.669	0.732	1.200	1.254	1.320	1.409	1.554	1.694	1.738	1.875
50	0.543	0.576	0.628	0.677	0.738	1.190	1.242	1.304	1.388	1.525	1.656	1.697	1.825
55	0.552	0.584	0.636	0.684	0.744	1.182	1.231	1.291	1.372	1.501	1.625	1.664	1.784
60	0.559	0.591	0.642	0.689	0.749		1.223	1.281	1.358	1.481	1.599	1.636	1.749
65	0.565	0.597	0.648	0.695	0.753	1.170	1.216	1.271	1.346	1.464	1.577	1.612	1.720
70	0.571	0.603	0.653		0.757					1.450		1.592	
75 80		0.608											
80 85		0.612 0.616											
90		0.620											
95		0.623											
100		0.626											
200		0.659											
500	0.654	0.682	0.726	0.765	0.811	1.103	1.131	1.165	1.209	1.275	1.336	1.354	1.408

DISTRIBUCION F DE SNEDECOR (31)

GRADOS DE LIBERTAD numerador $\rightarrow 120$

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	0.005	0.010	0.025	0.050	0.100	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
1	0.122	0.146	0.194	0.255	0.364	9.804	15.51	27.84	63.06	253.3	1014	1585	6339
2	0.181	0.209	0.263	0.326	0.426	3.468	4.473	6.145	9.483	19.49	39.49	49.49	99.47
3		0.253	0.310	0.373	0.469		2.984		5.143		13.95	16.29	26.22
4		0.287	0.346	0.409		2.081			3.775	5.658	8.309	9.376	13.56
5		0.315		0.437		1.872			3.123			6.712	
6 7		0.338 0.358	0.398 0.418	0.460 0.479	0.548 0.566	1.741 1.650	1.962	2.207	2.742	3.705 3.267	4.904 4.199	5.352	6.969
8		0.376	0.416	0.479	0.581	1.584			2.493		3.728	4.538 4.000	5.737 4.946
9		0.391	0.450			1.533			2.184		3.392	3.619	4.398
10		0.405			0.605	1.492		1.813		2.580	3.140	3.335	3.996
11		0.417	0.476		0.615	1.459			2.000			3.116	3.690
12	0.393	0.428	0.487	0.545	0.625	1.431	1.551	1.707	1.932	2.341	2.787	2.940	3.449
13	0.403	0.438	0.497	0.555	0.633	1.408	1.520	1.666	1.876	2.252	2.659	2.798	3.255
14	0.413	0.448	0.506	0.563	0.640	1.387	1.494	1.631	1.828	2.178	2.552	2.679	3.094
15	0.421	0.456	0.514	0.571	0.647	1.370	1.471	1.601	1.787	2.114	2.461	2.578	2.959
16	0.430	0.464	0.522	0.579	0.654	1.354	1.451	1.575	1.751	2.059	2.383	2.492	2.845
17		0.472	0.529	0.585	0.659	1.341	1.433	1.552	1.719		2.315	2.417	2.746
18	_	0.479	0.536	0.592	0.665	1.328	1.418	1.531	1.691	1.968			2.660
19		0.485		0.597		1.317		1.513	1.666	1.930		2.294	
20		0.491	0.548		0.675	1.307		1.496	1.643	1.896		2.242	
$\frac{21}{22}$		0.497 0.503	0.553 0.559		0.679 0.683	1.298 1.290	1.379		1.623 1.604			2.196 2.154	
23		0.508		0.617			1.368				2.041		
24		0.513	0.568			1.275		1.443				2.082	
25		0.517			0.694					1.768	1.981	2.050	
26		0.522	0.577	0.630	0.698	1.263	1.333		1.544	1.749	1.954		2.233
27	0.492	0.526	0.581	0.633	0.701	1.257	1.326	1.413	1.531	1.731	1.930	1.995	2.198
28	0.496	0.530	0.585	0.637	0.704	1.252	1.319	1.404	1.520	1.714	1.907	1.970	2.167
29	0.500	0.534	0.588	0.640	0.707	1.247	1.313	1.396	1.509	1.698	1.886	1.947	2.138
30	0.504	0.538	0.592	0.643	0.710	1.242	1.307	1.388	1.499	1.683	1.866	1.926	2.111
35	0.521	0.554	0.607	0.657	0.721	1.223	1.283	1.356	1.457	1.623	1.785	1.837	2.000
40		0.567	0.620	0.669	0.731		1.264		1.425	1.577		1.771	1.917
45		0.579	0.630	0.678	0.739	1.196	1.248	1.313	1.399	1.541	1.677	1.720	1.853
50		0.588	0.639	0.687	0.746	1.186	1.236	1.297	1.379	1.511	1.639	1.679	1.803
55 60	0.565 0.572	0.597 0.604	0.647 0.654	0.700	0.752 0.757	1.178 1.172	1.226 1.217	1.284 1.273	1.362 1.348	1.487 1.467	1.607 1.581	1.645 1.617	1.761 1.726
65		0.610	0.660		0.762		1.217	1.264		1.450	1.559	1.593	1.697
70		0.616											
75		0.622											
80		0.626											
85		0.631											
90	0.604	0.634	0.682	0.725	0.779	1.145	1.184	1.231	1.293	1.391	1.483	1.512	1.598
95	0.608	0.638	0.685	0.728	0.781	1.142	1.180	1.227	1.287	1.383	1.473	1.500	1.585
100	0.611	0.641	0.688	0.731	0.783	1.140	1.177	1.222	1.282	1.376	1.463	1.490	1.572
200		0.677										1.391	
500	0.677	0.704	0.744	0.781	0.825	1.096	1.122	1.154	1.194	1.255	1.311	1.327	1.377

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1 0.123 0.147 0.195 0.256 0.365 9.813 15.52 27.86 63.11 253.5 1015 1586 634 2 0.182 0.211 0.264 0.327 0.428 3.469 4.475 6.146 9.484 19.49 39.49 49.49 99.4 3 0.225 0.255 0.312 0.375 0.472 2.472 2.984 3.763 5.141 8.545 13.94 16.27 26.2 4 0.258 0.290 0.348 0.411 0.504 2.081 2.429 2.933 3.772 5.652 8.299 9.364 13.8 5 0.285 0.318 0.377 0.440 0.530 1.871 2.139 2.516 3.119 4.392 6.059 6.699 9.08 6 0.308 0.342 0.401 0.463 0.551 1.740 1.960 2.265 2.738 3.698 4.893 5.339 6.98 7 0.328 0.362 0.421 0.483 0.569 1.649 1.838 2.096<	90
3 0.225 0.255 0.312 0.375 0.472 2.472 2.984 3.763 5.141 8.545 13.94 16.27 26.2 4 0.258 0.290 0.348 0.411 0.504 2.081 2.429 2.933 3.772 5.652 8.299 9.364 13.8 5 0.285 0.318 0.377 0.440 0.530 1.871 2.139 2.516 3.119 4.392 6.059 6.699 9.09 6 0.308 0.342 0.401 0.463 0.551 1.740 1.960 2.265 2.738 3.698 4.893 5.339 6.98 7 0.328 0.362 0.421 0.483 0.569 1.649 1.838 2.096 2.488 3.260 4.188 4.526 5.72 8 0.346 0.380 0.439 0.500 0.584 1.582 1.750 1.974 2.312 2.959 3.716 3.988 4.92 9 0.361 0.396 0.455 0.515 0.598 1.531 1.682 1.8	
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