Tabla D.8: VALORES CRÍTICOS DE LA DISTRIBUCIÓN F (0,01)

f 0.01

área a la derecha del valor crítico = 0,01

											f 0.01							
		Grados de libertad del Numerador																
	g.d.l	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	g.d.l	
	1	4.052,2	4.999,5	5.403,4	5.624,6	5.763,6	5.859,0	5.928,4	5.981,1	6.022,5	6.055,8	6.083,3	6.106,3	6.125,9	6.142,7	6.157,3	1	
	2	98,503	99,000	99,166	99,249	99,299	99,333	99,356	99,374	99,388	99,399	99,408	99,416	99,422	99,428	99,433	2	
	3	34,116	30,817	29,457	28,710	28,237	27,911	27,672	27,489	27,345	27,229	27,133	27,052	26,983	26,924	26,872	3	
	4	21,198	18,000	16,694	15,977	15,522	15,207	14,976	14,799	14,659	14,546	14,452	14,374	14,307	14,249	14,198	4	
	5	16,258	13,274	12,060	11,392	10,967	10,672	10,456	10,289	10,158	10,051	9,963	9,888	9,825	9,770	9,722	5	
	6	13,745	10,925	9,780	9,148	8,746	8,466	8,260	8,102	7,976	7,874	7,790	7,718	7,657	7,605	7,559	6	
	7	12,246	9,547	8,451	7,847	7,460	7,191	6,993	6,840	6,719	6,620	6,538	6,469	6,410	6,359	6,314	7	
	8	11,259	8,649	7,591	7,006	6,632	6,371	6,178	6,029	5,911	5,814	5,734	5,667	5,609	5,559	5,515	8	
	9	10,561	8,022	6,992	6,422	6,057	5,802	5,613	5,467	5,351	5,257	5,178	5,111	5,055	5,005	4,962	9	
	10	10,044	7,559	6,552	5,994	5,636	5,386	5,200	5,057	4,942	4,849	4,772	4,706	4,650	4,601	4,558	10	
Denominador	10	10,044	7,557	0,332	5,774	3,030	3,300	3,200	3,037	7,772	4,047	7,772	4,700	4,030	4,001	4,550	10	
٦٩	11	9,646	7,206	6,217	5,668	5,316	5,069	4,886	4,744	4,632	4,539	4,462	4,397	4,342	4,293	4,251	11	
. <u>=</u>	12	9,330	6,927	5,953	5,412	5,064	4,821	4,640	4,499	4,388	4,296	4,220	4,155	4,100	4,052	4,010	12	
o	13	9,074	6,701	5,739	5,205	4,862	4,620	4,441	4,302	4,191	4,100	4,025	3,960	3,905	3,857	3,815	13	
Ę	14	8,862	6,515	5,564	5,035	4,695	4,456	4,278	4,140	4,030	3,939	3,864	3,800	3,745	3,698	3,656	14	
ă	15	8,683	6,359	5,417	4,893	4,556	4,318	4,142	4,004	3,895	3,805	3,730	3,666	3,612	3,564	3,522	15	
del	16	8,531	6,226	5,292	4,773	4,437	4,202	4,026	3,890	3,780	3,691	3,616	3,553	3,498	3,451	3,409	16	
Q	17	8,400	6,112	5,185	4,669	4,336	4,102	3,927	3,791	3,682	3,593	3,519	3,455	3,401	3,353	3,312	17	
libertad																		
ē	18	8,285	6,013	5,092	4,579	4,248	4,015	3,841	3,705	3,597	3,508	3,434	3,371	3,316	3,269	3,227	18	
유	19	8,185	5,926	5,010	4,500	4,171	3,939	3,765	3,631	3,523	3,434	3,360	3,297	3,242	3,195	3,153	19	
de	20	8,096	5,849	4,938	4,431	4,103	3,871	3,699	3,564	3,457	3,368	3,294	3,231	3,177	3,130	3,088	20	
S (21	8,017	5,780	4,874	4,369	4,042	3,812	3,640	3,506	3,398	3,310	3,236	3,173	3,119	3,072	3,030	21	
Grados	22	7,945	5,719	4,817	4,313	3,988	3,758	3,587	3,453	3,346	3,258	3,184	3,121	3,067	3,019	2,978	22	
ā	23	7,881	5,664	4,765	4,264	3,939	3,710	3,539	3,406	3,299	3,211	3,137	3,074	3,020	2,973	2,931	23	
Ŋ	24	7,823	5,614	4,718	4,218	3,895	3,667	3,496	3,363	3,256	3,168	3,094	3,032	2,977	2,930	2,889	24	
	25	7,770	5,568	4,675	4,177	3,855	3,627	3,457	3,324	3,217	3,129	3,056	2,993	2,939	2,892	2,850	25	
	20	7,770	0,000	1,070	1,177	0,000	0,027	0,107	0,021	0,217	0,127	0,000	2,770	2,707	2,072	2,000	20	
	26	7,721	5,526	4,637	4,140	3,818	3,591	3,421	3,288	3,182	3,094	3,021	2,958	2,904	2,857	2,815	26	
	27	7,677	5,488	4,601	4,106	3,785	3,558	3,388	3,256	3,149	3,062	2,988	2,926	2,871	2,824	2,783	27	
	28	7,636	5,453	4,568	4,074	3,754	3,528	3,358	3,226	3,120	3,032	2,959	2,896	2,842	2,795	2,753	28	
	29	7,598	5,420	4,538	4,045	3,725	3,499	3,330	3,198	3,092	3,005	2,931	2,868	2,814	2,767	2,726	29	
	30	7,562	5,390	4,510	4,018	3,699	3,473	3,304	3,173	3,067	2,979	2,906	2,843	2,789	2,742	2,700	30	
	31	7.530	5,362	4,484	3,993	3,675	3,449	3,281	3,149	3,043	2,955	2,882	2.820	2,765	2,718	2,677	31	
	32	7,499	5,336	4,459	3,969	3,652	3,427	3,258	3,127	3,021	2,934	2,860	2,798	2,744	2,696	2,655	32	
	33	7,471	5,312	4,437	3,948	3,630	3,406	3,238	3,106	3,000	2,913	2,840	2,777	2,723	2,676	2,634	33	
	34	7,444	5,289	4,416	3,927	3,611	3,386	3,218	3,100	2,981	2,894	2,821	2,758	2,723	2,657	2,615	34	
	35	7,444	5,268	4,410	3,908	3,592		3,210	3,067	2,963	2,876	2,803	2,730			2,597	35	
	30	7,419	3,200	4,390	3,900	3,392	3,368	3,200	3,009	2,903	2,070	2,003	2,740	2,686	2,639	2,397	33	
	40	7,314	5,179	4,313	3,828	3,514	3,291	3,124	2,993	2,888	2,801	2,727	2,665	2,611	2,563	2,522	40	
	60	7,077	4,977	4,126	3,649	3,339	3,119	2,953	2,823	2,718	2,632	2,559	2,496	2,442	2,394	2,352	60	
	80	6,963	4,881	4,036	3,563	3,255	3,036	2,871	2,742	2,637	2,551	2,478	2,415	2,361	2,313	2,271	80	
	90	6,925	4,849	4,007	3,535	3,228	3,009	2,845	2,715	2,611	2,524	2,451	2,389	2,334	2,286	2,244	90	
	100	6,895	4,824	3,984	3,513	3,206	2,988	2,823	2,694	2,590	2,503	2,430	2,368	2,313	2,265	2,223	100	
	120	6,851	4,787	3,949	3,480	3,174	2,956	2,792	2,663	2,559	2,472	2,399	2,336	2,282	2,234	2,192	120	
	inf.	6,635	4,605	3,782	3,319	3,017	2,802	2,639	2,511	2,407	2,321	2,248	2,185	2,130	2,082	2,039	inf.	
		0,000	.,000	0,.02	5,5.7	0,0.7	_,002	_,00,	_,	2,.07	_,	_,0	_,.55	2,.00	-,002	2,007		

Tabla D.8: VALORES CRÍTICOS DE LA DISTRIBUCIÓN F (0,01)

f 0.01

área a la derecha del valor crítico = 0,01

		Grados de libertad del Numerador												1 0.01			
	g.d.l	16	17	18	19	20	21	Grados de II	pertad del N 23	umerador 24	25	26	27	28	29	30	g.d.l
	g.d.i	10	.,	10		20	21	22	20	2.	20	20	2,	20	2,	00	g.u.i
	1	6.170,1	6.181,4	6.191,5	6.200,6	6.208,7	6.216,1	6.222,8	6.229,0	6.234,6	6.239,8	6.244,6	6.249,1	6.253,2	6.257,1	6.260,6	1
	2	99,437	99,440	99,444	99,447	99,449	99,452	99,454	99,456	99,458	99,459	99,461	99,462	99,463	99,465	99,466	2
	3	26,827	26,787	26,751	26,719	26,690	26,664	26,640	26,618	26,598	26,579	26,562	26,546	26,531	26,517	26,505	3
	4	14,154	14,115	14,080	14,048	14,020	13,994	13,970	13,949	13,929	13,911	13,894	13,878	13,864	13,850	13,838	4
	5	9,680	9,643	9,610	9,580	9,553	9,528	9,506	9,485	9,466	9,449	9,433	9,418	9,404	9,391	9,379	5
	6	7,519	7,483	7,451	7,422	7,396	7,372	7,351	7,331	7,313	7,296	7,280	7,266	7,253	7,240	7,229	6
	7	6,275	6,240	6,209	6,181	6,155	6,132	6,111	6,092	6,074	6,058	6,043	6,029	6,016	6,003	5,992	7
	8	5,477	5,442	5,412	5,384	5,359	5,336	5,316	5,297	5,279	5,263	5,248	5,234	5,221	5,209	5,198	8
	9	4,924	4,890	4,860	4,833	4,808	4,786	4,765	4,746	4,729	4,713	4,698	4,685	4,672	4,660	4,649	9
or	10	4,520	4,487	4,457	4,430	4,405	4,383	4,363	4,344	4,327	4,311	4,296	4,283	4,270	4,258	4,247	10
Jad	11	4,213	4,180	4,150	4,123	4,099	4,077	4,057	4,038	4,021	4,005	3,990	3,977	3,964	3,952	3,941	11
Ë	12	3,972	3,939	3,909	3,883	3,858	3,836	3,816	3,798	3,780	3,765	3,750	3,736	3,724	3,712	3,701	12
ō	13	3,778	3,745	3,716	3,689	3,665	3,643	3,622	3,604	3,587	3,571	3,556	3,543	3,530	3,518	3,507	13
en	14	3,619	3,586	3,556	3,529	3,505	3,483	3,463	3,444	3,427	3,412	3,397	3,383	3,371	3,359	3,348	14
	15	3,485	3,452	3,423	3,396	3,372	3,350	3,330	3,311	3,294	3,278	3,264	3,250	3,237	3,225	3,214	15
Grados de libertad del Denominador	16	3,372	3,339	3,310	3,283	3,259	3,237	3,216	3,198	3,181	3,165	3,150	3,137	3,124	3,112	3,101	16
aq	17	3,275	3,242	3,212	3,186	3,162	3,139	3,119	3,101	3,084	3,068	3,053	3,039	3,026	3,014	3,003	17
Ę	18	3,190	3,158	3,128	3,101	3,077	3,055	3,035	3,016	2,999	2,983	2,968	2,955	2,942	2,930	2,919	18
pe	19	3,116	3,084	3,054	3,027	3,003	2,981	2,961	2,942	2,925	2,909	2,894	2,880	2,868	2,855	2,844	19
<u>=</u>	20	3,051	3,018	2,989	2,962	2,938	2,916	2,895	2,877	2,859	2,843	2,829	2,815	2,802	2,790	2,778	20
ŏ			0.040								0.705		0.757	0.740	0.704		
ŏ	21	2,993	2,960	2,931	2,904	2,880	2,857	2,837	2,818	2,801	2,785	2,770	2,756	2,743	2,731	2,720	21
ä	22	2,941	2,908	2,879	2,852	2,827	2,805	2,785	2,766	2,749	2,733	2,718	2,704	2,691	2,679	2,667	22
Ö	23	2,894	2,861	2,832	2,805	2,781	2,758	2,738	2,719	2,702	2,686	2,671	2,657	2,644	2,632	2,620 2,577	23
	24 25	2,852	2,819 2,780	2,789 2,751	2,762 2,724	2,738 2,699	2,716	2,695	2,676	2,659	2,643	2,628	2,614	2,601	2,589 2,550		24 25
	25	2,813	2,760	2,731	2,724	2,099	2,677	2,657	2,638	2,620	2,604	2,589	2,575	2,562	2,550	2,538	25
	26	2,778	2,745	2,715	2,688	2,664	2,642	2,621	2,602	2,585	2,569	2,554	2,540	2,526	2,514	2,503	26
	27	2,746	2,713	2,683	2,656	2,632	2,609	2,589	2,570	2,552	2,536	2,521	2,507	2,494	2,481	2,470	27
	28	2,716	2,683	2,653	2,626	2,602	2,579	2,559	2,540	2,522	2,506	2,491	2,477	2,464	2,451	2,440	28
	29	2,689	2,656	2,626	2,599	2,574	2,552	2,531	2,512	2,495	2,478	2,463	2,449	2,436	2,423	2,412	29
	30	2,663	2,630	2,600	2,573	2,549	2,526	2,506	2,487	2,469	2,453	2,437	2,423	2,410	2,398	2,386	30
	31	2,640	2,606	2,577	2,550	2,525	2,502	2,482	2,463	2,445	2,429	2,414	2,399	2,386	2,374	2,362	31
	32	2,618	2,584	2,555	2,527	2,503	2,480	2,460	2,441	2,423	2,406	2,391	2,377	2,364	2,351	2,340	32
	33	2,597	2,564	2,534	2,507	2,482	2,460	2,439	2,420	2,402	2,386	2,370	2,356	2,343	2,330	2,319	33
	34	2,578	2,545	2,515	2,488	2,463	2,440	2,420	2,400	2,383	2,366	2,351	2,337	2,323	2,311	2,299	34
	35	2,560	2,527	2,497	2,470	2,445	2,422	2,401	2,382	2,364	2,348	2,333	2,318	2,305	2,292	2,281	35
	40	2,484	2,451	2,421	2,394	2,369	2,346	2,325	2,306	2,288	2,271	2,256	2,241	2,228	2,215	2,203	40
	60	2,315	2,281	2,251	2,223	2,198	2,175	2,153	2,134	2,115	2,098	2,083	2,068	2,054	2,041	2,028	60
	80	2,233	2,199	2,169	2,141	2,115	2,092	2,070	2,050	2,032	2,015	1,999	1,983	1,969	1,956	1,944	80
	90	2,206	2,172	2,142	2,114	2,088	2,065	2,043	2,023	2,004	1,987	1,971	1,956	1,942	1,928	1,916	90
	100	2,185	2,151	2,120	2,092	2,067	2,043	2,021	2,001	1,983	1,965	1,949	1,934	1,919	1,906	1,893	100
	120	2,154	2,119	2,089	2,060	2,035	2,011	1,989	1,969	1,950	1,932	1,916	1,901	1,886	1,873	1,860	120
	inf.	2,000	1,965	1,934	1,905	1,878	1,854	1,831	1,810	1,791	1,773	1,755	1,739	1,724	1,710	1,696	inf.
				•			•	•		•			•	•			

Tabla D.8: VALORES CRÍTICOS DE LA DISTRIBUCIÓN F (0,01)

f 0.01

área a la derecha del valor crítico = 0,01

	1	Grados de libertad del Numerador										1 0.01							
	g.d.l	31	32	33	34	35	36	Grados de III	38	umerador 39	40	50	60	100	120	inf.	g.d.l		
	1	(2(4 0	(2(7 2	6.270,1	(272 0	/ 27E /	/ 270 1	6.280,4	6.282,6	(204 0	(20(0	6.302,5	(212.0	6.334,1	(220 4	, 2/E 0	1		
	-	6.264,0	6.267,2		6.272,9	6.275,6	6.278,1			6.284,8	6.286,8		6.313,0		6.339,4	6.365,8	1		
	2	99,467	99,468	99,469	99,470	99,471	99,471	99,472	99,473	99,474	99,474	99,479	99,482	99,489	99,491	99,499	2		
	3	26,492	26,481	26,471	26,461	26,451	26,442	26,434	26,426	26,418	26,411	26,354	26,316	26,240	26,221	26,125	3		
	4	13,826	13,815	13,804	13,794	13,785	13,776	13,768	13,760	13,753	13,745	13,690	13,652	13,577	13,558	13,463	4		
	5	9,368	9,357	9,347	9,338	9,329	9,321	9,313	9,305	9,298	9,291	9,238	9,202	9,130	9,112	9,020	5		
	6	7,218	7,207	7,198	7,189	7,180	7,172	7,164	7,157	7,150	7,143	7,091	7,057	6,987	6,969	6,880	6		
	7	5,981	5,971	5,962	5,953	5,944	5,936	5,929	5,922	5,915	5,908	5,858	5,824	5,755	5,737	5,650	7		
	8	5,188	5,178	5,168	5,159	5,151	5,143	5,136	5,129	5,122	5,116	5,065	5,032	4,963	4,946	4,859	8		
	9	4,638	4,628	4,619	4,610	4,602	4,594	4,587	4,580	4,573	4,567	4,517	4,483	4,415	4,398	4,311	9		
ō	10	4,236	4,227	4,217	4,209	4,200	4,193	4,185	4,178	4,172	4,165	4,115	4,082	4,014	3,996	3,909	10		
del Denominador	11	3,931	3,921	3,912	3,903	3,895	3,887	3,880	3,873	3,866	3,860	3,810	3,776	3,708	3,690	3,602	11		
÷	12	3,690	3,681	3,671	3,663	3,654	3,647	3,639	3,632	3,626	3,619	3,569	3,535	3,467	3,449	3,361	12		
Ţ	13	3,497	3,487	3,478	3,469	3,461	3,453	3,445	3,438	3,432	3,425	3,375	3,341	3,272	3,255	3,165	13		
Ĕ	14	3,337	3,327	3,318	3,309	3,301	3,293	3,286	3,279	3,272	3,266	3,215	3,181	3,112	3,094	3,004	14		
De	15	3,204	3,194	3,184	3,176	3,167	3,160	3,152	3,145	3,138	3,132	3,081	3,047	2,977	2,959	2,868	15		
<u>–</u>	13	3,204	5,174	3,104	3,170	3,107	3,100	3,132	3,143	3,130	3,132	3,001	3,047	2,711	2,737	2,000	13		
D	16	3,090	3,080	3,071	3,062	3,054	3,046	3,039	3,031	3,025	3,018	2,967	2,933	2,863	2,845	2,753	16		
ag	17	2,993	2,983	2,973	2,965	2,956	2,948	2,941	2,934	2,927	2,920	2,869	2,835	2,764	2,746	2,653	17		
Ë	18	2,908	2,898	2,889	2,880	2,871	2,863	2,856	2,849	2,842	2,835	2,784	2,749	2,678	2,660	2,566	18		
pe	19	2,834	2,824	2,814	2,805	2,797	2,789	2,781	2,774	2,767	2,761	2,709	2,674	2,602	2,584	2,489	19		
≡	20	2,768	2,758	2,748	2,739	2,731	2,723	2,715	2,708	2,701	2,695	2,643	2,608	2,535	2,517	2,421	20		
de libertad	20	2,700	2,700	2,710	2,707		2,720	2,710	2,700	2,701		2,010	2,000	2,000	2,017	2, 12 1	20		
SC	21	2,709	2,699	2,690	2,681	2,672	2,664	2,657	2,649	2,642	2,636	2,584	2,548	2,475	2,457	2,360	21		
ŏ	22	2,657	2,647	2,637	2,628	2,620	2,612	2,604	2,597	2,590	2,583	2,531	2,495	2,422	2,403	2,305	22		
Grados	23	2,609	2,599	2,590	2,581	2,572	2,564	2,556	2,549	2,542	2,535	2,483	2,447	2,373	2,354	2,256	23		
Ö	24	2,567	2,556	2,547	2,538	2,529	2,521	2,513	2,506	2,499	2,492	2,440	2,403	2,329	2,310	2,211	24		
	25	2,527	2,517	2,508	2,499	2,490	2,482	2,474	2,467	2,460	2,453	2,400	2,364	2,289	2,270	2,169	25		
	26	2,492	2,482	2,472	2,463	2,454	2,446	2,438	2,431	2,424	2,417	2,364	2,327	2,252	2,233	2,131	26		
	27	2,459	2,449	2,439	2,430	2,421	2,413	2,405	2,398	2,391	2,384	2,330	2,294	2,218	2,198	2,097	27		
	28	2,429	2,449	2,409	2,400	2,391	2,383	2,403	2,367	2,360	2,354	2,300	2,263	2,187	2,167	2,064	28		
	29	2,401	2,391	2,381	2,372	2,363	2,355	2,347	2,339	2,332	2,325	2,300	2,234	2,157	2,137	2,034	29		
	30	2,401	2,365	2,355	2,372	2,303	2,333	2,347	2,337	2,306	2,323	2,245	2,234	2,130	2,130	2,006	30		
	30	2,375	2,303	2,355	2,340	2,337	2,329	2,321	2,313	2,300	2,277	2,245	2,200	2,131	2,111	2,000	30		
	31	2,351	2,341	2,331	2,322	2,313	2,304	2,296	2,289	2,282	2,275	2,220	2,183	2,106	2,086	1,980	31		
	32	2,329	2,318	2,308	2,299	2,290	2,282	2,274	2,266	2,259	2,252	2,198	2,160	2,082	2,062	1,956	32		
	33	2,308	2,297	2,287	2,278	2,269	2,261	2,253	2,245	2,238	2,231	2,176	2,139	2,060	2,040	1,933	33		
	34	2,288	2,277	2,268	2,258	2,249	2,241	2,233	2,225	2,218	2,211	2,156	2,118	2,040	2,019	1,911	34		
	35	2,270	2,259	2,249	2,240	2,231	2,222	2,214	2,207	2,200	2,193	2,137	2,099	2,020	2,000	1,891	35		
	33	2,270	2,257	2,247	2,240	2,231	2,222	2,217	2,207	2,200	2,175	2,107	2,077	2,020	2,000	1,071	33		
	40	2,192	2,182	2,172	2,162	2,153	2,145	2,136	2,129	2,121	2,114	2,058	2,019	1,938	1,917	1,805	40		
	60	2,017	2,006	1,996	1,986	1,976	1,968	1,959	1,951	1,943	1,936	1,877	1,836	1,749	1,726	1,601	60		
	80	1,932	1,921	1,910	1,900	1,890	1,881	1,873	1,864	1,856	1,849	1,788	1,746	1,655	1,630	1,494	80		
	90	1,904	1,892	1,882	1,872	1,862	1,853	1,844	1,836	1,828	1,820	1,759	1,716	1,623	1,598	1,457	90		
	100	1,881	1,870	1,859	1,849	1,839	1,830	1,821	1,813	1,805	1,797	1,735	1,692	1,598	1,572	1,427	100		
	120	1,848	1,836	1,826	1,815	1,806	1,796	1,787	1,779	1,771	1,763	1,700	1,656	1,559	1,533	1,381	120		
	inf.	1,684	1,671	1,660	1,649	1,638	1,628	1,619	1,610	1,601	1,592	1,523	1,473	1,358	1,325	1,000	inf.		