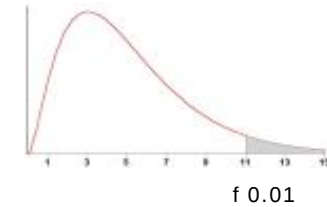


Tabla D.8: VALORES CRÍTICOS DE LA DISTRIBUCIÓN F (0,01)

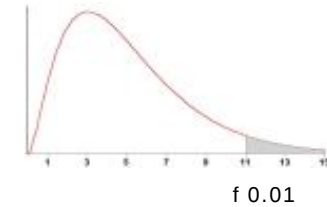
área a la derecha del valor crítico = 0,01



Grados de libertad del Denominador	Grados de libertad del Numerador															g.d.l
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	3,087	2,981	2,894	2,821	2,758	2,704	2,657	2,615	34
35	7,419	5,268	4,396	3,908	3,592	3,368	3,200	3,069	2,963	2,876	2,803	2,740	2,686	2,639	2,597	35
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.

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

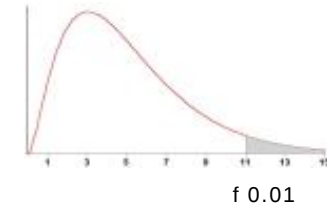
área a la derecha del valor crítico = 0,01



Grados de libertad del Denominador	Grados de libertad del Numerador															g.d.l
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
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
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
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
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
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
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
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
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
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
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
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
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
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
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	23
24	2,852	2,819	2,789	2,762	2,738	2,716	2,695	2,676	2,659	2,643	2,628	2,614	2,601	2,589	2,577	24
25	2,813	2,780	2,751	2,724	2,699	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)

área a la derecha del valor crítico = 0,01



Grados de libertad del Denominador	Grados de libertad del Numerador															g.d.l
	31	32	33	34	35	36	37	38	39	40	50	60	100	120	inf.	
1	6.264,0	6.267,2	6.270,1	6.272,9	6.275,6	6.278,1	6.280,4	6.282,6	6.284,8	6.286,8	6.302,5	6.313,0	6.334,1	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
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
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
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
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
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
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
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
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
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
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
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
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
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	2,419	2,409	2,400	2,391	2,383	2,375	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	2,271	2,234	2,158	2,138	2,034	29
30	2,375	2,365	2,355	2,346	2,337	2,329	2,321	2,313	2,306	2,299	2,245	2,208	2,131	2,111	2,006	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
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.