

Table C.7. Acceptance limits for the Kolmogorov test of goodness of fit.

Sample size (<i>n</i>)	Significance level				
	0.20	0.15	0.10	0.05	0.01
1	0.900	0.925	0.950	0.975	0.995
2	0.684	0.726	0.776	0.842	0.929
3	0.565	0.596	0.636	0.708	0.829
4	0.493	0.525	0.565	0.624	0.734
5	0.447	0.474	0.509	0.563	0.669
6	0.410	0.435	0.468	0.519	0.617
7	0.381	0.405	0.436	0.483	0.576
8	0.358	0.381	0.410	0.454	0.542
9	0.339	0.360	0.387	0.430	0.513
10	0.323	0.343	0.369	0.409	0.489
11	0.308	0.327	0.352	0.391	0.468
12	0.296	0.314	0.338	0.375	0.449
13	0.285	0.302	0.325	0.361	0.432
14	0.275	0.292	0.314	0.349	0.418
15	0.266	0.282	0.304	0.338	0.404
16	0.258	0.274	0.295	0.327	0.392
17	0.250	0.266	0.286	0.318	0.381
18	0.244	0.259	0.279	0.309	0.371
19	0.237	0.252	0.271	0.301	0.361
20	0.232	0.246	0.265	0.294	0.352
25	0.208	0.221	0.238	0.264	0.317
30	0.190	0.202	0.218	0.242	0.290
35	0.177	0.187	0.202	0.224	0.269
40	0.165	0.176	0.189	0.210	0.252
50	0.148	0.158	0.170	0.188	0.226
60	0.136	0.144	0.155	0.172	0.207
70	0.126	0.134	0.144	0.160	0.192
80	0.118	0.125	0.135	0.150	0.179
Large <i>n</i>	$1.07/\sqrt{n}$	$1.14/\sqrt{n}$	$1.22/\sqrt{n}$	$1.36/\sqrt{n}$	$1.63/\sqrt{n}$

Reject the hypothesized distribution $F(x)$ if $D = \max|F_n(x) - F(x)|$ exceeds the tabulated value.

The asymptotic formula gives values that are slightly too high — by 1% to 2% for $n = 80$.

Table C.8. Parameters of constrained noninformative prior for binomial p .

p_0	b	α
0.50	0.	0.5000
0.40	-0.8166	0.4168
0.30	-1.748	0.3590
0.20	-3.031	0.3243
0.15	-4.027	0.3211
0.10	-5.743	0.3424
0.09	-6.295	0.3522
0.08	-6.958	0.3648
0.07	-7.821	0.3802
0.06	-8.978	0.3980
0.05	-10.61	0.4171
0.04	-13.08	0.4358
0.03	-17.22	0.4531
0.02	-25.53	0.4693
0.01	-50.52	0.4848
0.005	-100.5	0.4925
0.001	-500.5	0.4985
0	$-\infty$	0.5000

The table gives parameters of the constrained noninformative prior for a binomial parameter p , when the assumed prior mean is p_0 . The exact constrained noninformative prior has the form

$$f_{\text{prior}}(p) \propto e^{bp} p^{-1/2} (1-p)^{-1/2},$$

with b tabulated above.

The tabulated value α is the first parameter of a beta distribution that has the same mean and variance as the constrained noninformative prior. The second parameter of that beta distribution is obtained by solving $\alpha/(\alpha + \beta) = p_0$. This results in the formula $\beta = \alpha(1 - p_0)/p_0$. Then a beta(α, β) distribution with these parameters approximates the exact constrained noninformative prior.