Tables for Duncan's multiple range tests

Critical values $q'(p, df; 0.05)$ for Duncan's multiple range tests

$df \backslash p$	2	3	4	5	6	7	8	9	10
1	17.969	17.969	17.969	17.969	17.969	17.969	17.969	17.969	17.969
2	6.085	6.085	6.085	6.085	6.085	6.085	6.085	6.085	6.085
3	4.501	4.516	4.516	4.516	4.516	4.516	4.516	4.516	4.516
4	3.926	4.013	4.033	4.033	4.033	4.033	4.033	4.033	4.033
5	3.635	3.749	3.796	3.814	3.814	3.814	3.814	3.814	3.814
6	3.460	3.586	3.649	3.680	3.694	3.697	3.697	3.697	3.697
7	3.344	3.477	3.548	3.588	3.611	3.622	3.625	3.625	3.625
8	3.261	3.398	3.475	3.521	3.549	3.566	3.575	3.579	3.579
9	3.199	3.339	3.420	3.470	3.502	3.523	3.536	3.544	3.547
10	3.151	3.293	3.376	3.430	3.465	3.489	3.505	3.516	3.522
11	3.113	3.256	3.341	3.397	3.435	3.462	3.480	3.493	3.501
12	3.081	3.225	3.312	3.370	3.410	3.439	3.459	3.474	3.484
13	3.055	3.200	3.288	3.348	3.389	3.419	3.441	3.458	3.470
14	3.033	3.178	3.268	3.328	3.371	3.403	3.426	3.444	3.457
15	3.014	3.160	3.250	3.312	3.356	3.389	3.413	3.432	3.446
16	2.998	3.144	3.235	3.297	3.343	3.376	3.402	3.422	3.437
17	2.984	3.130	3.222	3.285	3.331	3.365	3.392	3.412	3.429
18	2.971	3.117	3.210	3.274	3.320	3.356	3.383	3.404	3.421
19	2.960	3.106	3.199	3.264	3.311	3.347	3.375	3.397	3.415
20	2.950	3.097	3.190	3.255	3.303	3.339	3.368	3.390	3.409

Tables for Duncan's multiple range tests

Critical values $q'(p, df; 0.05)$ for Duncan's multiple range tests *(cont.)*

$df \backslash p$	2	3	4	5	6	7	8	9	10	11	
21	2.941	3.088	3.181	3.247	3.295	3.332	3.361	3.385	3.403	3.418	3
22	2.933	3.080	3.173	3.239	3.288	3.326	3.355	3.379	3.398	3.414	3
23	2.926	3.072	3.166	3.233	3.282	3.320	3.350	3.374	3.394	3.410	3
24	2.919	3.066	3.160	3.226	3.276	3.315	3.345	3.370	3.390	3.406	3
25	2.913	3.059	3.154	3.221	3.271	3.310	3.341	3.366	3.386	3.403	3
26	2.907	3.054	3.149	3.216	3.266	3.305	3.336	3.362	3.382	3.400	3
27	2.902	3.049	3.144	3.211	3.262	3.301	3.332	3.358	3.379	3.397	3
28	2.897	3.044	3.139	3.206	3.257	3.297	3.329	3.355	3.376	3.394	3
29	2.892	3.039	3.135	3.202	3.253	3.293	3.326	3.352	3.373	3.392	3
30	2.888	3.035	3.131	3.199	3.250	3.290	3.322	3.349	3.371	3.389	3
31	2.884	3.031	3.127	3.195	3.246	3.287	3.319	3.346	3.368	3.387	3
32	2.881	3.028	3.123	3.192	3.243	3.284	3.317	3.344	3.366	3.385	3
33	2.877	3.024	3.120	3.188	3.240	3.281	3.314	3.341	3.364	3.383	3
34	2.874	3.021	3.117	3.185	3.238	3.279	3.312	3.339	3.362	3.381	3
35	2.871	3.018	3.114	3.183	3.235	3.276	3.309	3.337	3.360	3.379	3
36	2.868	3.015	3.111	3.180	3.232	3.274	3.307	3.335	3.358	3.378	3
37	2.865	3.013	3.109	3.178	3.230	3.272	3.305	3.333	3.356	3.376	3
38	2.863	3.010	3.106	3.175	3.228	3.270	3.303	3.331	3.355	3.375	3
39	2.861	3.008	3.104	3.173	3.226	3.268	3.301	3.330	3.353	3.373	3
40	2.858	3.005	3.102	3.171	3.224	3.266	3.300	3.328	3.352	3.372	3
48	2.843	2.991	3.087	3.157	3.211	3.253	3.288	3.318	3.342	3.363	3
60	2.829	2.976	3.073	3.143	3.198	3.241	3.277	3.307	3.333	3.355	3
80	2.814	2.961	3.059	3.130	3.185	3.229	3.266	3.297	3.323	3.346	3
120	2.800	2.947	3.045	3.116	3.172	3.217	3.254	3.286	3.313	3.337	3
240	2.786	2.933	3.031	3.103	3.159	3.205	3.243	3.276	3.304	3.329	3
∞	2.772	2.918	3.017	3.089	3.146	3.193	3.232	3.265	3.294	3.320	3

Tables for Duncan's multiple range tests

Critical values $q'(p, df; 0.01)$ for Duncan's multiple range tests

$df \backslash p$	2	3	4	5	6	7	8	9	10
1	90.024	90.024	90.024	90.024	90.024	90.024	90.024	90.024	90.024
2	14.036	14.036	14.036	14.036	14.036	14.036	14.036	14.036	14.036
3	8.260	8.321	8.321	8.321	8.321	8.321	8.321	8.321	8.321
4	6.511	6.677	6.740	6.755	6.755	6.755	6.755	6.755	6.755
5	5.702	5.893	5.989	6.040	6.065	6.074	6.074	6.074	6.074
6	5.243	5.439	5.549	5.614	5.655	5.680	5.694	5.701	5.703
7	4.949	5.145	5.260	5.333	5.383	5.416	5.439	5.454	5.464
8	4.745	4.939	5.056	5.134	5.189	5.227	5.256	5.276	5.291
9	4.596	4.787	4.906	4.986	5.043	5.086	5.117	5.142	5.160
10	4.482	4.671	4.789	4.871	4.931	4.975	5.010	5.036	5.058
11	4.392	4.579	4.697	4.780	4.841	4.887	4.923	4.952	4.975
12	4.320	4.504	4.622	4.705	4.767	4.815	4.852	4.882	4.907
13	4.260	4.442	4.560	4.643	4.706	4.754	4.793	4.824	4.850
14	4.210	4.391	4.508	4.591	4.654	4.703	4.743	4.775	4.802
15	4.167	4.346	4.463	4.547	4.610	4.660	4.700	4.733	4.760
16	4.131	4.308	4.425	4.508	4.572	4.622	4.662	4.696	4.724
17	4.099	4.275	4.391	4.474	4.538	4.589	4.630	4.664	4.692
18	4.071	4.246	4.361	4.445	4.509	4.559	4.601	4.635	4.664
19	4.046	4.220	4.335	4.418	4.483	4.533	4.575	4.610	4.639
20	4.024	4.197	4.312	4.395	4.459	4.510	4.552	4.587	4.617

Tables for Duncan's multiple range tests

Critical values $q'(p, df; 0.05)$ for Duncan's multiple range tests *(cont.)*

$df \backslash p$	2	3	4	5	6	7	8	9	10	11	
21	4.004	4.177	4.291	4.374	4.438	4.489	4.531	4.567	4.597	4.622	4
22	3.986	4.158	4.272	4.355	4.419	4.470	4.513	4.548	4.578	4.604	4
23	3.970	4.141	4.254	4.337	4.402	4.453	4.496	4.531	4.562	4.588	4
24	3.955	4.126	4.239	4.322	4.386	4.437	4.480	4.516	4.546	4.573	4
25	3.942	4.112	4.224	4.307	4.371	4.423	4.466	4.502	4.532	4.559	4
26	3.930	4.099	4.211	4.294	4.358	4.410	4.452	4.489	4.520	4.546	4
27	3.918	4.087	4.199	4.282	4.346	4.397	4.440	4.477	4.508	4.535	4
28	3.908	4.076	4.188	4.270	4.334	4.386	4.429	4.465	4.497	4.524	4
29	3.898	4.065	4.177	4.260	4.324	4.376	4.419	4.455	4.486	4.514	4
30	3.889	4.056	4.168	4.250	4.314	4.366	4.409	4.445	4.477	4.504	4
31	3.881	4.047	4.159	4.241	4.305	4.357	4.400	4.436	4.468	4.495	4
32	3.873	4.039	4.150	4.232	4.296	4.348	4.391	4.428	4.459	4.487	4
33	3.865	4.031	4.142	4.224	4.288	4.340	4.383	4.420	4.452	4.479	4
34	3.859	4.024	4.135	4.217	4.281	4.333	4.376	4.413	4.444	4.472	4
35	3.852	4.017	4.128	4.210	4.273	4.325	4.369	4.406	4.437	4.465	4
36	3.846	4.011	4.121	4.203	4.267	4.319	4.362	4.399	4.431	4.459	4
37	3.840	4.005	4.115	4.197	4.260	4.312	4.356	4.393	4.425	4.452	4
38	3.835	3.999	4.109	4.191	4.254	4.306	4.350	4.387	4.419	4.447	4
39	3.830	3.993	4.103	4.185	4.249	4.301	4.344	4.381	4.413	4.441	4
40	3.825	3.988	4.098	4.180	4.243	4.295	4.339	4.376	4.408	4.436	4
48	3.793	3.955	4.064	4.145	4.209	4.261	4.304	4.341	4.374	4.402	4
60	3.762	3.922	4.030	4.111	4.174	4.226	4.270	4.307	4.340	4.368	4
80	3.732	3.890	3.997	4.077	4.140	4.192	4.236	4.273	4.306	4.335	4
120	3.702	3.858	3.964	4.044	4.107	4.158	4.202	4.239	4.272	4.301	4
240	3.672	3.827	3.932	4.011	4.073	4.125	4.168	4.206	4.239	4.268	4
∞	3.643	3.796	3.900	3.978	4.040	4.091	4.135	4.172	4.205	4.235	4