Appendix III : Tables of entropy values for P < 1

The two tables below may be used to calculate entropy values. The left hand column (p) is the percentage value for a set, the right hand column show the weighted entropy value. Once the ratios of the various sets have been calculated their entropies may be looked up and summated with the help of this table, Maximum Entropy values may similarly be looked up on the table in Appendix IV.

P	log P	$\log_2$ P	P($\log_2$ P)
0.01	2.00000	6.64386	0.06644
0.02	1.69897	5.64386	0.11288
0.03	1.52288	5.05889	0.15177
0.04	1.39794	4.64386	0.18575
0.05	1.30103	4.32193	0.21610
0.06	1.22185	4.05889	0.24353
0.07	1.15490	3.83650	0.26856
0.08	1.09691	3.64386	0.29151
0.09	1.04576	3.47393	0.31265
0.1	1.00000	3.32193	0.33219
0.11	0.95861	3.18442	0.35029
0.12	0.92082	3.05889	0.36707
0.13	0.88606	2.94342	0.38264
0.14	0.85387	2.83650	0.39711
0.15	0.82391	2.73697	0.41054
0.16	0.79588	2.64386	0.42302
0.17	0.76955	2.55639	0.43459
0.18	0.74473	2.47393	0.44531
0.19	0.72125	2.39593	0.45523
0.2	0.69897	2.32193	0.46439
0.21	0.67778	2.25154	0.47282
0.22	0.65758	2.18442	0.48057
0.23	0.63827	2.12029	0.48767
0.24	0.61979	2.05889	0.49413
0.25	0.60206	2.00000	0.50000
0.26	0.58503	1.94342	0.50529
0.27	0.56864	1.88897	0.51002
0.28	0.55284	1.83650	0.51422
0.29	0.53760	1.78588	0.51790
0.3	0.52288	1.73697	0.52109
0.31	0.50864	1.68966	0.52379
0.32	0.49485	1.64386	0.52603
0.33	0.48149	1.59946	0.52782
0.34	0.46852	1.55639	0.52917
0.35	0.45593	1.51457	0.53010
0.36	0.44370	1.47393	0.53062
0.37	0.43180	1.43440	0.53073
0.38	0.42022	1.39593	0.53045
0.39	0.40894	1.35845	0.52980
0.4	0.39794	1.32193	0.52877
0.41	0.38722	1.28630	0.52738
0.42	0.37675	1.25154	0.52565
0.43	0.36653	1.21759	0.52356
0.44	0.35655	1.18442	0.52115
0.45	0.34679	1.15200	0.51840
0.46	0.33724	1.12029	0.51534
0.47	0.32790	1.08927	0.51196
0.48	0.31876	1.05889	0.50827
0.49	0.30980	1.02915	0.50428
0.5	0.30103	1.00000	0.50000

P	log P	$\log_2$ P	P($\log_2$ P)
0.51	0.29243	0.97143	0.49543
0.52	0.28400	0.94342	0.49058
0.53	0.27572	0.91594	0.48545
0.54	0.26761	0.88897	0.48004
0.55	0.25964	0.86250	0.47437
0.56	0.25181	0.83650	0.46844
0.57	0.24413	0.81097	0.46225
0.58	0.23657	0.78588	0.45581
0.59	0.22915	0.76121	0.44912
0.6	0.22185	0.73697	0.44218
0.61	0.21467	0.71312	0.43500
0.62	0.20761	0.68966	0.42759
0.63	0.20066	0.66658	0.41994
0.64	0.19382	0.64386	0.41207
0.65	0.18709	0.62149	0.40397
0.66	0.18046	0.59946	0.39564
0.67	0.17393	0.57777	0.38710
0.68	0.16749	0.55639	0.37835
0.69	0.16115	0.53533	0.36938
0.7	0.15490	0.51457	0.36020
0.71	0.14874	0.49411	0.35082
0.72	0.14267	0.47393	0.34123
0.73	0.13668	0.45403	0.33144
0.74	0.13077	0.43440	0.32146
0.75	0.12494	0.41504	0.31128
0.76	0.11919	0.39593	0.30091
0.77	0.11351	0.37707	0.29034
0.78	0.10791	0.35845	0.27959
0.79	0.10237	0.34008	0.26866
0.8	0.09691	0.32193	0.25754
0.81	0.09151	0.30401	0.24625
0.82	0.08619	0.28630	0.23477
0.83	0.08092	0.26882	0.22312
0.84	0.07572	0.25154	0.21129
0.85	0.07058	0.23447	0.19930
0.86	0.06550	0.21759	0.18713
0.87	0.06048	0.20091	0.17479
0.88	0.05552	0.18442	0.16229
0.89	0.05061	0.16812	0.14963
0.9	0.04576	0.15200	0.13680
0.91	0.04096	0.13606	0.12382
0.92	0.03621	0.12029	0.11067
0.93	0.03152	0.10470	0.09737
0.94	0.02687	0.08927	0.08391
0.95	0.02228	0.07400	0.07030
0.96	0.01773	0.05889	0.05654
0.97	0.01323	0.04394	0.04263
0.98	0.00877	0.02915	0.02856
0.99	0.00436	0.01450	0.01435

Appendix IV : Tables of entropy values for P >= 1

This table may be used to look up maximum entropy. The value for which the entropy is required is found in the left column. The second column shows the entropy derived with log base 10, while the right column provides the entropy derived with log base 2.

P	log P	Log2(P)
1	0.00000	0.00000
2	0.30103	1.00000
3	0.47712	1.58496
4	0.60206	2.00000
5	0.69897	2.32193
6	0.77815	2.58496
7	0.84510	2.80735
8	0.90309	3.00000
9	0.95424	3.16993
10	1.00000	3.32193
11	1.04139	3.45943
12	1.07918	3.58496
13	1.11394	3.70044
14	1.14613	3.80735
15	1.17609	3.90689
16	1.20412	4.00000
17	1.23045	4.08746
18	1.25527	4.16993
19	1.27875	4.24793
20	1.30103	4.32193
21	1.32222	4.39232
22	1.34242	4.45943
23	1.36173	4.52356
24	1.38021	4.58496
25	1.39794	4.64386
26	1.41497	4.70044
27	1.43136	4.75489
28	1.44716	4.80735
29	1.46240	4.85798
30	1.47712	4.90689
31	1.49136	4.95420
32	1.50515	5.00000
33	1.51851	5.04439
34	1.53148	5.08746
35	1.54407	5.12928
36	1.55630	5.16993
37	1.56820	5.20945
38	1.57978	5.24793
39	1.59106	5.28540
40	1.60206	5.32193
41	1.61278	5.35755
42	1.62325	5.39232
43	1.63347	5.42626
44	1.64345	5.45943
45	1.65321	5.49185
46	1.66276	5.52356
47	1.67210	5.55459
48	1.68124	5.58496
49	1.69020	5.61471
50	1.69897	5.64386

P	log P	Log2(P)
51	1.70757	5.67243
52	1.71600	5.70044
53	1.72428	5.72792
54	1.73239	5.75489
55	1.74036	5.78136
56	1.74819	5.80735
57	1.75587	5.83289
58	1.76343	5.85798
59	1.77085	5.88264
60	1.77815	5.90689
61	1.78533	5.93074
62	1.79239	5.95420
63	1.79934	5.97728
64	1.80618	6.00000
65	1.81291	6.02237
66	1.81954	6.04439
67	1.82607	6.06609
68	1.83251	6.08746
69	1.83885	6.10852
70	1.84510	6.12928
71	1.85126	6.14975
72	1.85733	6.16993
73	1.86332	6.18982
74	1.86923	6.20945
75	1.87506	6.22882
76	1.88081	6.24793
77	1.88649	6.26679
78	1.89209	6.28540
79	1.89763	6.30378
80	1.90309	6.32193
81	1.90849	6.33985
82	1.91381	6.35755
83	1.91908	6.37504
84	1.92428	6.39232
85	1.92942	6.40939
86	1.93450	6.42626
87	1.93952	6.44294
88	1.94448	6.45943
89	1.94939	6.47573
90	1.95424	6.49185
91	1.95904	6.50779
92	1.96379	6.52356
93	1.96848	6.53916
94	1.97313	6.55459
95	1.97772	6.56986
96	1.98227	6.58496
97	1.98677	6.59991
98	1.99123	6.61471
99	1.99564	6.62936