TWO STATE PROBLEM

kB 1.38E-023

p1/p0 n1/n0

exp(-e1/(kB*T)/exp(-e0/(kB*T))

exp(-(e1-e0)/(kb*T))

SPACING AS FUNCTION OF kB*T

Factor of kB*T		dE	1.00E-004	1.00E-003	1.00E-002	1.00E-001	1.00E+000	2.00E+000	5.00E+000	1.00E+001	4.00E+001
T [K]	kB*T [J]		dE=0.0001*kB	dE=0.001*kB*T	dE=0.01*kB*T	dE=0.1*kB*T	dE=1*kB*T	dE=2*kb*T	dE=5*kB*T	dE=10*kB*T	dE=40*kB*T
10	1.38E-022		1.38E-026	1.38E-025	1.38E-024	1.38E-023	1.38E-022	2.76E-022	6.90E-022	1.38E-021	5.52E-021
50	6.90E-022		6.90E-026	6.90E-025	6.90E-024	6.90E-023	6.90E-022	1.38E-021	3.45E-021	6.90E-021	2.76E-020
100	1.38E-021		1.38E-025	1.38E-024	1.38E-023	1.38E-022	1.38E-021	2.76E-021	6.90E-021	1.38E-020	5.52E-020
150	2.07E-021		2.07E-025	2.07E-024	2.07E-023	2.07E-022	2.07E-021	4.14E-021	1.04E-020	2.07E-020	8.28E-020
200	2.76E-021		2.76E-025	2.76E-024	2.76E-023	2.76E-022	2.76E-021	5.52E-021	1.38E-020	2.76E-020	1.10E-019
290	4.00E-021		4.00E-025	4.00E-024	4.00E-023	4.00E-022	4.00E-021	8.01E-021	2.00E-020	4.00E-020	1.60E-019
300	4.14E-021		4.14E-025	4.14E-024	4.14E-023	4.14E-022	4.14E-021	8.28E-021	2.07E-020	4.14E-020	1.66E-019
400	5.52E-021		5.52E-025	5.52E-024	5.52E-023	5.52E-022	5.52E-021	1.10E-020	2.76E-020	5.52E-020	2.21E-019
500	6.90E-021		6.90E-025	6.90E-024	6.90E-023	6.90E-022	6.90E-021	1.38E-020	3.45E-020	6.90E-020	2.76E-019
600	8.28E-021		8.28E-025	8.28E-024	8.28E-023	8.28E-022	8.28E-021	1.66E-020	4.14E-020	8.28E-020	3.31E-019

T POPULATION OF P1 AT VARIOUS TEMPERATURES BUT GIVEN SPACING

10	1.00E+000	9.99E-001	9.90E-001	9.05E-001	3.68E-001	1.35E-001	6.74E-003	4.54E-005	4.25E-018
50	1.00E+000	1.00E+000	9.98E-001	9.80E-001	8.19E-001	6.70E-001	3.68E-001	1.35E-001	3.35E-004
100	1.00E+000	1.00E+000	9.99E-001	9.90E-001	9.05E-001	8.19E-001	6.07E-001	3.68E-001	1.83E-002
150	1.00E+000	1.00E+000	9.99E-001	9.93E-001	9.36E-001	8.75E-001	7.17E-001	5.13E-001	6.95E-002
200	1.00E+000	1.00E+000	1.00E+000	9.95E-001	9.51E-001	9.05E-001	7.79E-001	6.07E-001	1.35E-001
290	1.00E+000	1.00E+000	1.00E+000	9.97E-001	9.66E-001	9.33E-001	8.42E-001	7.08E-001	2.52E-001
300	1.00E+000	1.00E+000	1.00E+000	9.97E-001	9.67E-001	9.36E-001	8.46E-001	7.17E-001	2.64E-001
400	1.00E+000	1.00E+000	1.00E+000	9.98E-001	9.75E-001	9.51E-001	8.82E-001	7.79E-001	3.68E-001
500	1.00E+000	1.00E+000	1.00E+000	9.98E-001	9.80E-001	9.61E-001	9.05E-001	8.19E-001	4.49E-001
600	1.00E+000	1.00E+000	1.00E+000	9.98E-001	9.83E-001	9.67E-001	9.20E-001	8.46E-001	5.13E-001

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