

	A	B	C	D	E	F	G	H	I	J
1	Fit normal distribution to the following data and find expected frequencies.									
2										
3	class	frequency	mid-value (x)	LCB	UCB	z	P(z < z1)	P(z1 < z < z2)	Expected Freq	p(x-value)
4			=AVERAGE(D5:E5)			=STANDARDIZE(D5,\$C\$17,\$C\$19)				=NORM.DIST(D5,\$C\$17,\$C\$19,TRUE)
5	20-30	1	25	20	30	-3.276061268	0.00053	0.006724845	0.67248	0.000526329
6	30-40	3	35	30	40	-2.444573637	0.00725	0.046111738	4.61117	0.007251174
7	40-50	16	45	40	50	-1.613086005	0.05336	0.16386241	16.3862	0.053362912
8	50-60	34	55	50	60	-0.781598374	0.21723	0.30266936	30.2669	0.217225321
9	60-70	28	65	60	70	0.049889258	0.51989	0.291048388	29.1048	0.519894681
10	70-80	14	75	70	80	0.881376889	0.81094	0.145688198	14.5688	0.810943069
11	80-90	3	85	80	90	1.712864521	0.95663	0.037894701	3.78947	0.956631267
12	90-100	1	95	90	100	2.544352153	0.99453	0.005106079	0.51061	0.994525968
13		100		100		3.375839784	0.99963			0.999632046
14										
15										
16	Cases	Symbol	Value	Formula						
17	Mean	μ	59.4	=SUMPRODUCT(C5:C12,B5:B12)/SUM(B5:B12)						
18	Variance	σ^2	144.64	=SUMPRODUCT(C5:C12,C5:C12,B5:B12)/SUM(B5:B12)-C17*C17						
19	Std. Dev	σ	12.0266371	=SQRT(C18)						
20										
21										
22	The Expected Frequencies are:									
23	0.6725									
24	4.6112									
25	16.3862									
26	30.2669									
27	29.1048									
28	14.5688									
29	3.7895									
30	0.5106									