	A	B	C	D	E	F	G	H	I	J
1		A	B	C	D	E	F	G	H	I
2	1	QSN1								
3	2		No of failure (x)	0	1	2	3	4	5	6
4	3		probability P(x)	0.18	0.28	0.25	0.18	0.06	0.04	0.01
5	4									
6	5									
7	6		Measure	Value	Formula					
8	7		E(X)	1.82	=SUMPRODUCT(D2:I3,D3:I4)					
9	8		E(X^2)	5.22	=SUMPRODUCT(D3:I3^2,D4:I4)					
10	9		Var(X)	1.9076	=C8-C7^2					
11	10		E(2X+3)	6.64	=2*C7+3					
12	11		Var(2X+3)	7.6304	=4*C9					
13	12									
14	13	QSN 2	Number of computers	0	100	200	300	400	500	
15	14		Probability	0.05	0.2	0.3	0.25	0.15	0.05	
16	15									
17	16		Probability	Value	Formula					
18	17	a	P(X=300)	0.25	=F14					
19	18	b	P(X = 400 or 500)	0.2	=G14+H14					
20	19	c	P(X≥300)	0.45	=F14+G14+H14					
21	20	d	E(X)	240	=SUMPRODUCT(C13:G13^2,C14:G14)					
22	21		E(X2)	73000	=SUMPRODUCT(C13:H13^2,C14:H14)					
23	22		Var(X)	15400	=C27-C26^2					
24	23		Standard deviatio	124.0967365	=SQRT(C22)					
25	24									
26	25	**QSN 3**								
27	26	Outcome	102	105	108	111	114	117	Total	
28	27	Frequency	10	20	45	15	20	15	125	
29	28	P(x)	0.08	0.16	0.36	0.12	0.16	0.12		
30	29									
31	30		Measure	Value	Formula					
32	31		E(X)	109.44	=SUMPRODUCT(B26:G26,B28:G28)					
33	32		E(X^2)	11995.92	=SUMPRODUCT(B26:G26^2,B28:G28)					
34	33		Var(X)	18.8064	=C32-C31^2					
35	34		E(2X+3)	221.88	=2*C31+3					
36	35		Var(2X+3)	75.2256	=4*C33					
37	36									
38	37		Cell	Forumla						
39	38		B28	=B27/H27						
40	39		H27	=SUM(B27:G27)						