	A	B	C	D	E	F	G	H	I	J
1	QSN 1									
2		Solution:								
3		Given,								
4			p	0.4						
5			n	5						
6										
7			Probability	Value		Formula				
8		a	P(X=0)	0.07776	=BINOMDIST(0,D5,D4,0)					
9		b	P(X=1)	0.2592	=BINOMDIST(1,D5,D4,0)					
10		c	P(X≤1)	0.33696	=BINOMDIST(1,D5,D4,1)					
11		d	P(X≥2)	0.66304	=1-BINOMDIST(1,D5,D4,1)					
12		e	P(X<2)	0.33696	=BINOMDIST(1,D5,D14,1)					
13		f	P(X>2)	0.31744	=1-BINOMDIST(2,D5,D4,1)					
14										
15	QSN 2									
16		X	0	1	2	3	4			
17			28	62	46	10	4			
18										
19		Solution:								
20		x	f	P(x)	Expected ,f(x)=N*P(x)		Formula			
21		0	28	0.197926	30		=ROUND(150*D21,0)			
22		1	62	0.395259	59		=ROUND(150*D22,0)			
23		2	46	0.296	44		=ROUND(150*D23,0)			
24		3	10	0.098519	15		=ROUND(150*D24,0)			
25		4	4	0.012296	2		=ROUND(150*D25,0)			
26			150							
27										
28		mean	1.333333	=SUMPRODUCT(C26:G26,C27:G27)/C36						
29		np	1.333333	=C28						
30		n	4							
31		p	0.333333	=C29/C30						
32		P(x)=BINOMDIST(B21,4,0.333,0)								
33	QSN 3									
34		Solution:								
35		n	5							
36		p	0.3	=6/20						
37										
38		Probability	Value		Formula					
39	a	P(X=2)	0.3087	=BINOMDIST(2,C35,C36,0)						
40	b	P(X≥2)	0.47178	=1-BINOMDIST(1,C35,C36,1)						
41	c	P(X≤3)	0.96922	=BINOMDIST(3,C35,C36,1)						
42	d	P(X≤4)	0.99757	=BINOMDIST(4,C35,C36,1)						
43	e	P(X>2)	0.47178	=1-BINOMDIST(1,C35,C36,1)						
44	f	P(X=0)	0.16807	=BINOMDIST(0,C35,C36,0)						
45										
46	QSN 4									
47		Solution:								
48		n	10							
49		p	0.04	we use Poisson distribution						
50		mean(λ)	0.4	=C75*C76						
51										
52			Probability	Value		Fomula				
53		a	P(X=2)	0.053626	=POISSON(2,C50,0)					
54		b	P(X≥2)	0.061552	=1-POISSON(1,C50,1)					
55		c	P(X≤3)	0.999224	=POISSON(3,C50,1)					
56		d	P(X>2)	0.007926	=1-POISSON(2,C50,1)					
57										
58										
59										

	A	B	C	D	E	F	G	H	I	J
60										
61	QSN 5									
62		Solution:								
63		mean(λ)	2.35							
64										
65		Probability	Value		Formula					
66	a	P(X≤2)	0.582825	=POISSON(2,C63,1)						
67	b	P(X≥2)	0.680513	=1-POISSON(1,C63,1)						
68	c	P(X=1)	0.224118	=POISSON(1,C63,0)						
69	d	P(X≤4)	0.910297	=POISSON(4,C63,1)						
70										
71	QSN 6									
72		Solution:								
73										
74		x	f	P(x)	Expected,f(x)=N*P(x)			Formula		
75		0	51	0.353455	53			=ROUND(150*D75,0)		
76		1	54	0.367593	55			=ROUND(150*D76,0)		
77		2	36	0.191148	29			=ROUND(150*D77,0)		
78		3	6	0.066265	10			=ROUND(150*D78,0)		
79		4	3	0.017229	3			=ROUND(150*D79,0)		
80			150							
81										
82		Mean	1.04							
83		D75	=POISSON(B75,1.04,0)							
84										
85	QSN 7									
86		Solution:								
87		Mean(μ)		100000						
88			σ	20000						
89										
90		Probability	Value				Formula			
91	a	P(X<12500	0.89435			=NORMDIST(125000,D87,D88,1)				
92	b	P(105000<	0.334486	=NORMDIST(130000,D87,D88,1)-NORMDIST(105000,D87,D88,1)						
93	c	P(X>12000	0.158655			=1-NORMDIST(120000,D87,D88,1)				
94										
95	QSN 9									
96		Solution:								
97		Mean(μ)	42							
98		σ	24							
99		N	1000							
100										
101		Probability	Value			Formula				
102	a	P(X>60)	0.226627			=1-NORMDIST(60,C97,C98,1)				
103	b	P(20<X<44	0.353548	=NORMDIST(44,C97,C98,1)-NORMDIST(20,C97,C98,1)						
104	c	P(X<30)	0.308538		=NORMDIST(30,C97,C98,1)					
105										
106		Number	Value		Formula					
107	a	n(X>60)	227	=ROUND(1000*C102,0)						
108	b	n(20<X<44	354	=ROUND(1000*C103,0)						
109	c	n(X<30)	309	=ROUND(1000*C104,0)						