

	A	B	C	D	E	F	G
1	Fit the poisson distribution and find the expected frequencies.						
2	Find the probabilities of:						
3	(i) $P(X=3)$	(ii) $P(X!=3)$					
4	(iii) $P(X<3)$	(iv) $P(X\leq 3)$					
5	(v) $P(X>3)$	(vi) $P(X\geq 3)$					
6							
7	x	f	p(x)	f(x)	round f(x)		
8			=POISSON.DIST(A9,\$C\$22,FALSE)		=ROUND(D9,0)		
9	0	211	0.26178797	190.0581	190		
10	1	250	0.35085357	254.7197	255		
11	2	154	0.23511055	170.6903	171		
12	3	68	0.10503332	76.25419	76		
13	4	20	0.03519195	25.54935	26		
14	5	12	0.00943299	6.848353	7		
15	6	7	0.00210705	1.529717	2		
16	7	3	0.00040342	0.29288	0		
17	8	1	0.00006758	0.049065	0		
18		726	0.99998840	725.9916	727		
19							
20	Cases	Symbol	Value	Formula			
21	No. Of Cases	n	8	=MAX(A9:A17)			
22	Mean	λ	1.340220386	=SUMPRODUCT(A9:A17,B9:B17)/SUM(B9:B17)			
23							
24	Probabilities	x	p(x)	Formula			
25	$X=3$	3	0.105033319	=POISSON.DIST(B25,\$C\$22,FALSE)			
26	$X!=3$	3	0.894966681	=1-POISSON.DIST(B26,\$C\$22,FALSE)			
27	$X<3$	2	0.847752094	=POISSON.DIST(B27,\$C\$22,TRUE)			
28	$X\leq 3$	3	0.952785413	=POISSON.DIST(B28,\$C\$22,TRUE)			
29	$X>3$	3	0.047214587	=1-C28			
30	$X\geq 3$	2	0.152247906	=1-C27			