

The number of breakdowns on a particular section of road is recorded each day over a period of 90 days. It is suggested that the number of breakdowns follows a Poisson distribution with mean 3.5. The data is summarised in the table, together with some of the expected frequencies resulting from the suggested Poisson distribution.

Number of breakdowns per day	0	1	2	3	4	5	6	7	8 or more
Observed frequency	0	5	13	17	21	16	9	5	4
Expected frequency	2.718	9.512	16.646		16.993	11.895		3.469	2.407

(a) Complete the table. [2]

(b) Carry out a goodness of fit test, at the 10% significance level, to determine whether or not  $Po(3.5)$  is a good fit to the data. [6]