

A statistician believes that the number of telephone calls received by an advice centre in a 10-minute interval can be modelled by the Poisson distribution  $Po(1.9)$ . The number of calls received in a randomly chosen 10-minute interval was recorded on each of 100 days. The results are summarised in the table, together with some of the expected frequencies corresponding to the distribution  $Po(1.9)$ .

Number of calls	0	1	2	3	4	5	6 or more
Observed frequency	10	18	35	21	11	4	1
Expected frequency	14.957	28.418	26.997				1.322

**(a)** Complete the table. [2]

**(b)** Carry out a goodness of fit test, at the 10% significance level, to determine whether the statistician's belief is reasonable. [6]