AQA – Chi squared test for association – AS Further Mathematics Statistics

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Two employees, *A* and *B*, both produce the same toy for a company.

The company records the total number of errors made per day by each employee during a 40-day period. The results are summarised in the following table.

Number of errors made per day

Employee		0	1	2	3 or more	Total
	A	8	10	20	2	40
	B	18	4	15	3	40
	Total	26	14	35	5	80

The company claims that there is an association between employee and number of errors made per day.

(a) Test the company's claim, using the 5% level of significance.

[9 marks]

(b) By considering observed and expected frequencies, interpret in context the association between employee and number of errors made per day.

[2 marks]

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