

Two companies, P and Q , produce a certain type of paint brush. An independent examiner rates the quality of the brushes produced as poor, satisfactory or good. He takes a random sample of brushes from each company. The examiner's ratings are summarised in the table.

Company	Poor	Satisfactory	Good
P	18	43	64
Q	22	22	31

(a) Test, at the 5% significance level, whether quality of brushes is independent of company. [7]

(b) Compare the quality of the brushes produced by the two companies. [1]