

18 It is believed that 25% of the customers at a bakery buy a loaf of bread.

In an attempt to increase this proportion, the manager of the bakery provided free samples for the customers to taste.

To decide whether providing free samples had been effective, a large random sample of customers leaving the bakery were asked whether they had purchased a loaf of bread.

A hypothesis test at the 5% significance level was carried out on the data collected.

The test statistic calculated was found to be in the critical region.

18 (a) State the Null and Alternative hypotheses for this test.

[1 mark]

18 (b) State, in context, the conclusion to this test.

[2 marks]