

GCSE Statistics - Diagnostic test

Sampling

NAME: _____

1

Jenny is doing a survey on people (tenants) who rent flats. She uses two rental companies 'Letsmove' and 'Supafat'. Her hypothesis is

"Tenants who rent with 'Letsmove' make fewer complaints than those who use 'Supafat'."

- (a) Give two different reasons why Jenny should take a sample of tenants and not take a census.

Reason 1

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Reason 2

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(2 marks)

- (b) Jenny decides to take a sample using stratification.

- (b) (i) Name one category which she could use to stratify her sample.

Answer (1 mark)

- (b) (ii) Give a reason why she might choose this category.

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(1 mark)

2

A market research company wants to find out the views of customers about a new supermarket that has just opened.

- (a) Give two reasons why the company should take a sample rather than a census.

(i)

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(ii)

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.....

(2)

The market research company uses a questionnaire.

(b) Write down an example of a closed question that could be used on a questionnaire.

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(2)

(c) Give two reasons why a pilot survey (pre-test) should be carried out.

(i)
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(ii)
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(2)

3 A gardener wants to know how many ladybirds there are on the plants in his greenhouse.

There are 3000 plants in the greenhouse.

The plants are arranged in 100 rows of 30.

He takes a random sample of 30 plants.

(a) Write down a sampling frame he could use.

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(1)

(b) Describe how he can take a random sample.

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(2)

Total _____ out of 13