



## GCSE Maths Takeaway 110 - Stratified Sampling

Name: .....

Date: .....

Follow up Questions for Edexcel GCSE – June 2014 – Higher – Paper 2 (Calc) – Question 23a

Which of the following needs to be true for a sample to be random?

- A** There are lots of items to choose from
- B** Each item has an equal chance of being selected
- C** Every item is different
- D** Once selected, you don't put any item back

Correct Answer: A B C D

Explanation:

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Follow up Questions for Edexcel GCSE – June 2014 – Higher – Paper 2 (Calc) – Question 23b

Here are the ages of people in a small village:

Age (years)	0-12	13-24	25-40	41-60	61+
Number of people	35	58	125	103	79

A stratified sample of 70 people is to be taken  
How many should be taken from the 13-24 group?

Which of the following calculations would correctly work out the answer?

- A**  $\frac{58}{70} \times 400$
- B**  $\frac{58}{70}$
- C**  $\frac{400}{70} \times 58$
- D**  $\frac{70}{400} \times 58$

Correct Answer: A B C D

Explanation:

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What calculation would answer the following question?

In a teenage professional football club of 340 players, 18 are aged between 11 and 12. If a stratified sample of size 100 were to be carried out, how many 11-12 year olds should be included in the sample?

- A)**  $(18 \div 100)$
- B)**  $(18 \div 340) \times 11.5$
- C)**  $(18 \div 100) \times 340$
- D)**  $(18 \div 340) \times 100$

Correct Answer: A B C D

Explanation:

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What calculation would answer the following question?

The table gives information about the number of girls in 4 schools.

School	A	B	C	D	Total
Number of girls	126	82	201	52	461

A stratified sample of size 50 is taken, how many students from school C should be chosen?

**A)**  $(201 \div 461) \times 50$     **B)**  $(461 \div 201) \times 50$

**C)**  $(50 \div 4)$     **D)**  $(461 \div 50) \times 201$

Correct Answer: A B C D

Explanation:

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What calculation would answer the following question?

Here is a table showing how many students there are at Geometry High

Year	7	8	9	10	11	TOTAL
No of students	100	120	115	130	126	591

I want to take stratified sample of 150 people from the school. How many year 11's should I include in my sample.

**A)**  $150 \div 5$     **B)**  $591 \div 126$

**C)**  $(126 \div 591) \times 150$     **D)**  $(591 \div 150) \times 126$

Correct Answer: A B C D

Explanation:

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