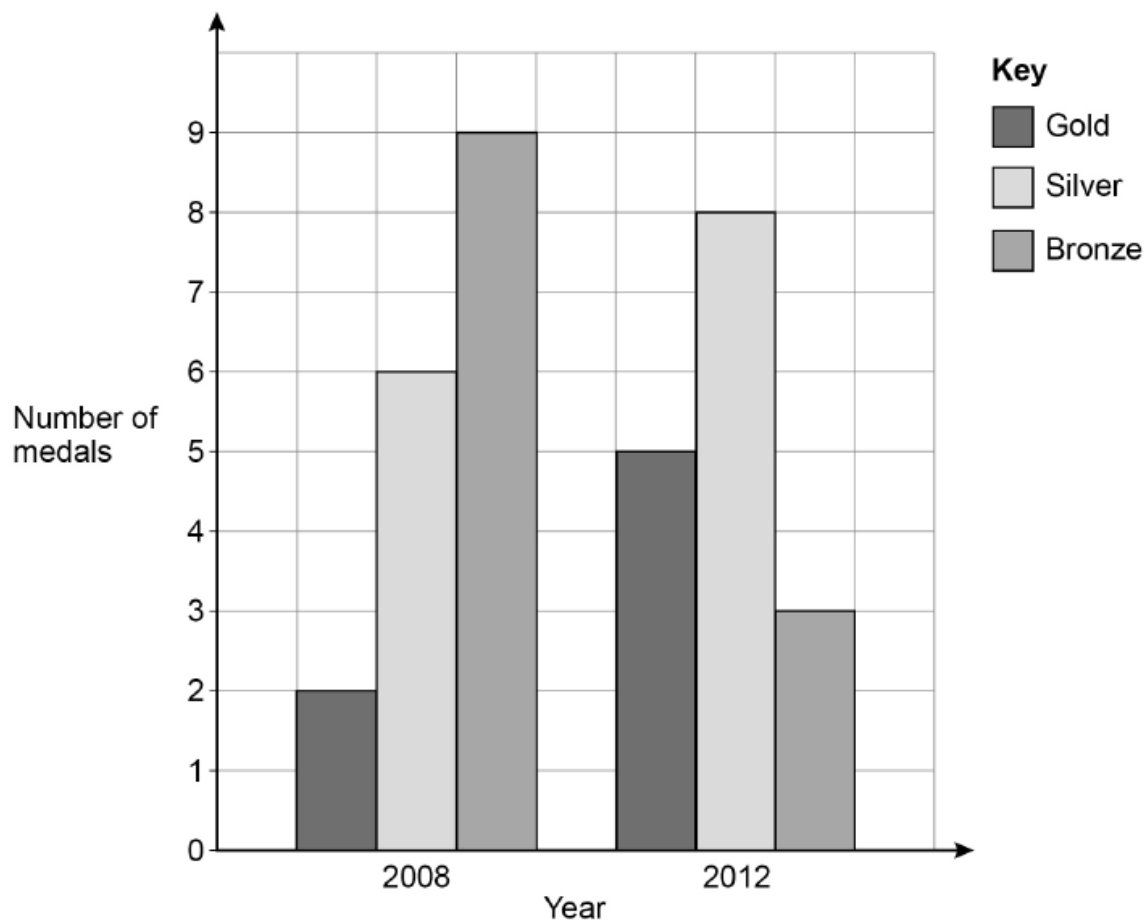


Statistics – GCSE Mathematics Paper 3**1. No.7**

The bar chart shows the number of medals won by a country at events in 2008 and 2012



(a) Complete this statement about the medals won by the country in 2008

[1 mark]

number of Silver medals = _____ × number of Gold medals

- (b) Show that the country won **more** medals in 2008 than in 2012

[2 marks]

- (c) At the 2016 event the country won an **equal** number of each type of medal.

Here is a statement about the medals won by the country in 2016

The total number of medals **cannot** be 25

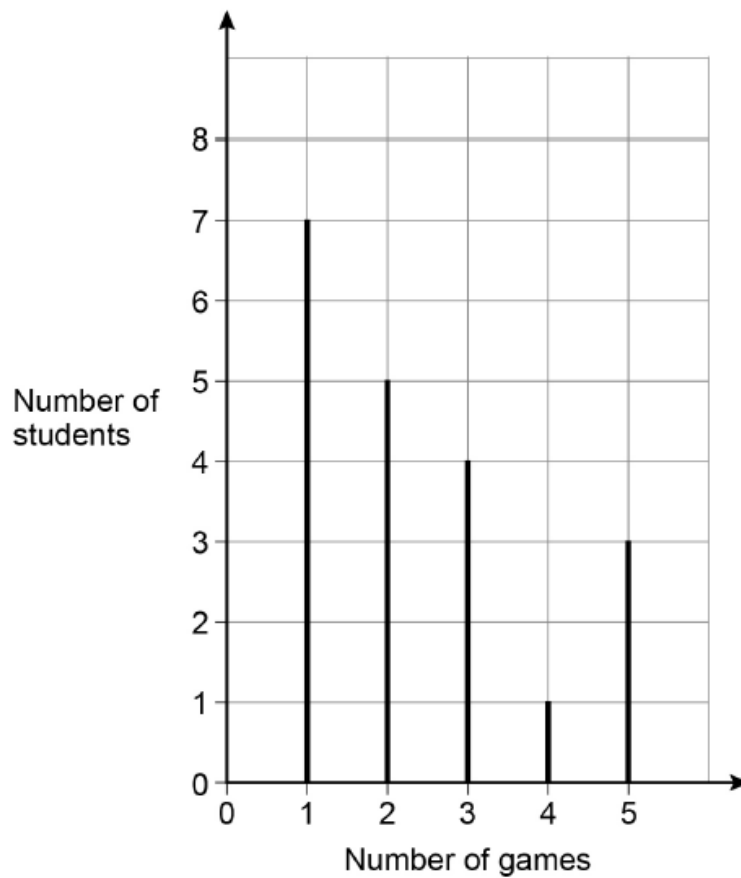
Give a reason why the statement is correct.

[1 mark]

2. No.14

20 students are asked how many video games they played last month.

The chart shows information about the results.



(a) How many students played more than 2 games?

[1 mark]

Answer _____

(b) Work out the mean number of games played.

Give your answer as a decimal.

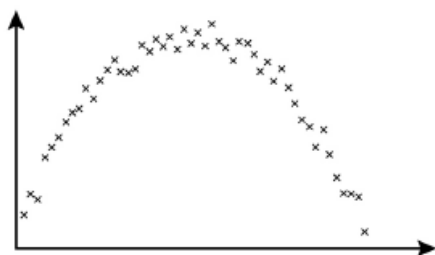
[3 marks]

Answer _____

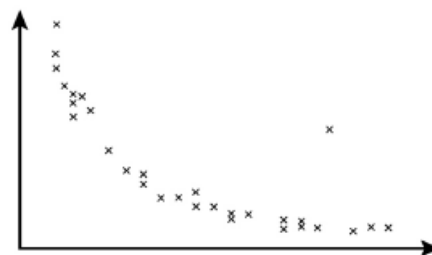
3. No.3

Here are four scatter graphs.

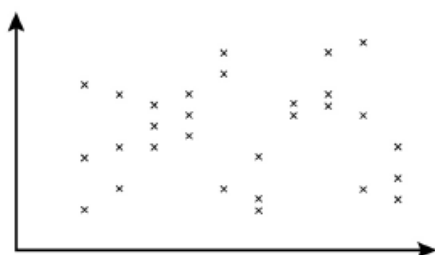
Graph A



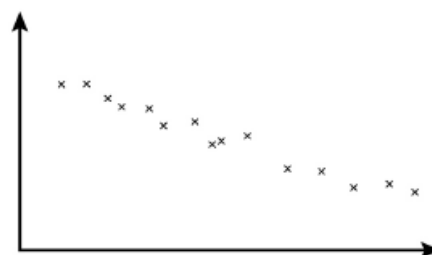
Graph B



Graph C



Graph D



- (a) For which graph is a straight line of best fit appropriate?
Circle your answer.

[1 mark]

A

B

C

D

- (b) Which graph has **one** outlier?
Circle your answer.

[1 mark]

A

B

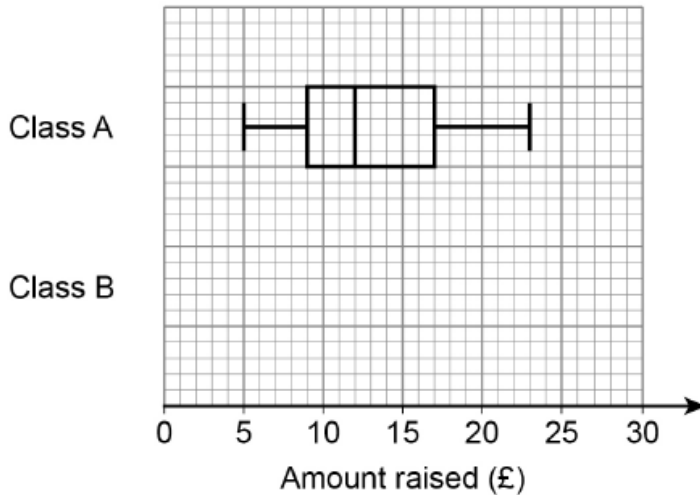
C

D

4. No.14

Students in two classes, A and B, raised money for charity.

The box plot for class A is shown on the grid.



For class B,

- the lowest amount was £3 and the highest amount was £26
- the lower quartile was £11
- the median was £2 greater than the class A median
- the interquartile range was $1\frac{1}{2}$ times greater than the class A interquartile range.

Draw the box plot for class B on the grid.

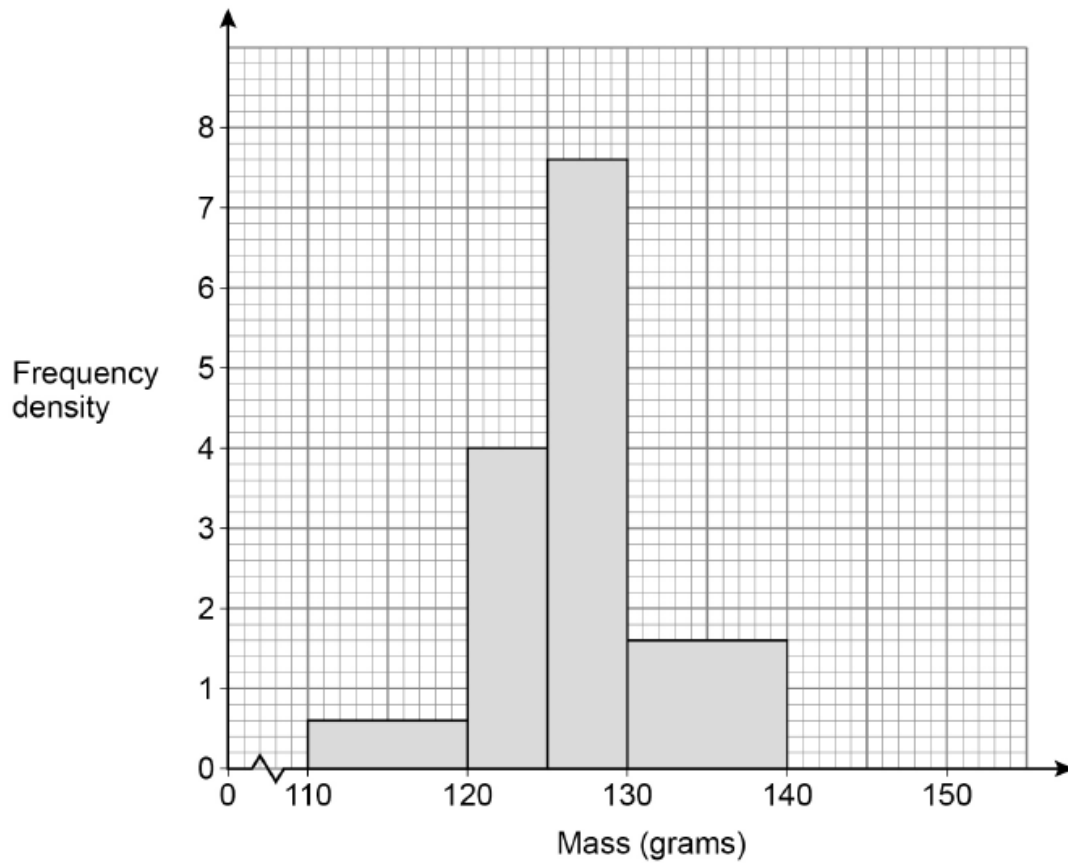
[4 marks]

5. No.25

A company makes tubes of toothpaste.

The masses of 80 tubes are checked.

A histogram is drawn to represent the data.



The company makes 28 000 tubes each day.

Estimate how many tubes each day have a mass **less than** 122 grams.

[4 marks]

6. No.9

School A has 72 tutor groups.

Each group has 28 students.

School B has 16 tutor groups.

Each group has 18 students.

Show that $\frac{\text{number of students at school A}}{\text{number of students at school B}}$ is a whole number.

[2 marks]

7. No.28

Six positive numbers have
a mean of 10
a range of 19

Four of the numbers are 12 7 15 3

Work out the other two numbers.

[3 marks]

Answer _____ and _____

8. No.21

Here is some information about the ages of babies at a clinic.

Age, x (weeks)	Frequency		
$0 \leq x < 5$	18		
$5 \leq x < 10$	23		
$10 \leq x < 20$	17		
$20 \leq x < 50$	21		

Draw a histogram to represent the information.

[4 marks]

