

7th September



Corbettmaths

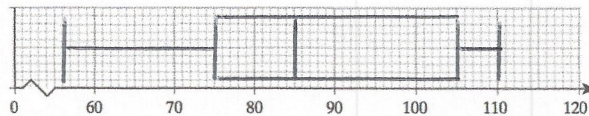
The points A(3, 5) and C(12, 2) are points on the straight line ABC.

$AB:BC = 2:1.$

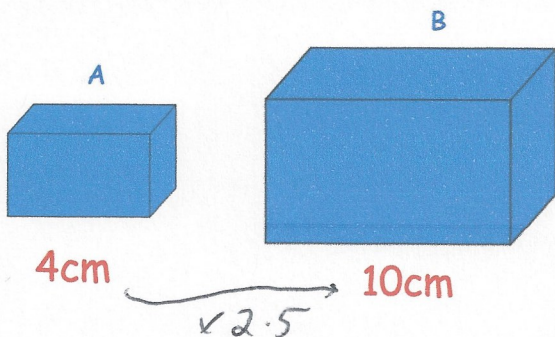
Work out the coordinates of B

$(9, 3)$

A students in a class complete a puzzle.
 The longest time taken was 110 seconds.
 Median time taken to complete the puzzle was 85 seconds
 The range was 54 seconds.
 The lower quartile was 75 seconds.
 The interquartile range was 30 seconds



Complete the box plot



Cuboids A and B are similar.
 The volume of cuboid A is 50cm^3 .
 Work out the volume of cuboid B.

$50 \times 2.5^3 = 781.25\text{cm}^3$

A is inversely proportional to N^2

When $A = 10, N = 2.$ $A \propto \frac{1}{N^2}$

Find A when $N = 4.$ $A = \frac{k}{N^2}$

$10 = \frac{k}{2^2}$ $A = \frac{40}{N^2}$
 $10 = \frac{k}{4}$ $A = \frac{40}{16} = 2.5$
 $k = 40$

Line 1 has gradient 4 and passes through the point (2, 9).

What is its equation?

$y = 4x + 1$

Write down the equation of a line perpendicular to line 1.

$y = -\frac{1}{4}x + 10$