

10 Orange squash is made from orange juice and water.

Sean has two different cartons of orange squash, carton **P** and carton **Q**.
The table gives information about the two cartons.

Carton P	Carton Q
Total volume of orange squash is 250 millilitres 30% of the total volume is orange juice and the remainder is water	Total volume of orange squash is 250 millilitres 160 millilitres of the total volume is water and the remainder is orange juice

Work out the difference in the volume of orange juice in carton **P** and the volume of orange juice in carton **Q**.

..... millilitres

(Total for Question 10 is 3 marks)

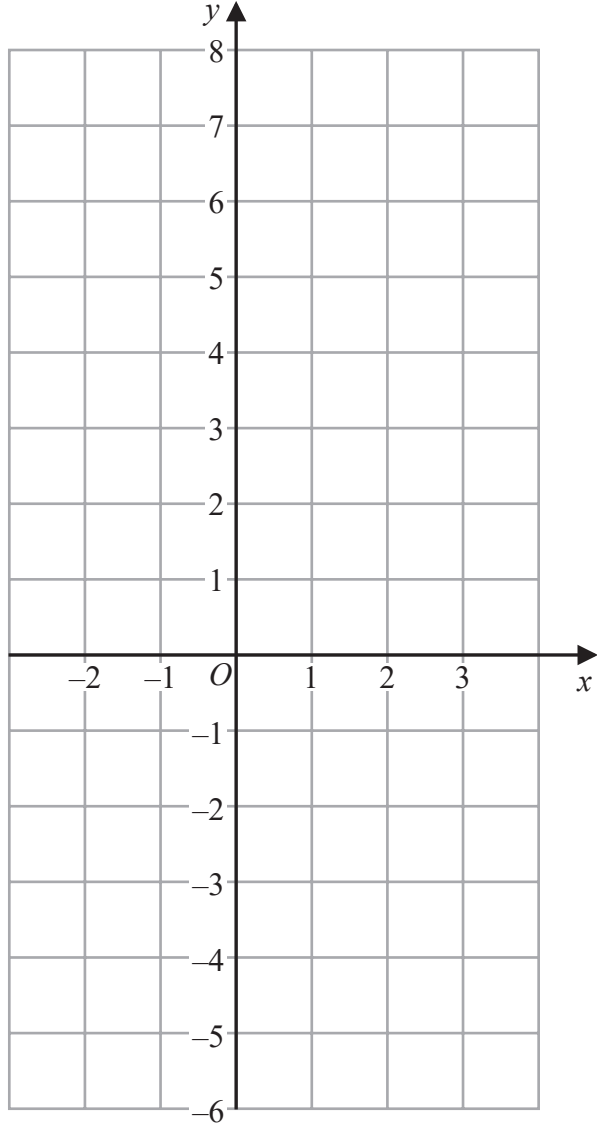


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11 On the grid below, draw the graph of $y = 1 - 2x$ for values of x from -2 to 3



(Total for Question 11 is 3 marks)



12 (a) Show that $\frac{7}{8} - \frac{5}{12} = \frac{11}{24}$

(2)

(b) Find the highest common factor (HCF) of 130 and 208
Show your working clearly.

.....
(2)

(Total for Question 12 is 4 marks)

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13 $p = t - ac$

$$t = 18$$

$$a = -3$$

$$c = 5$$

(a) Work out the value of p

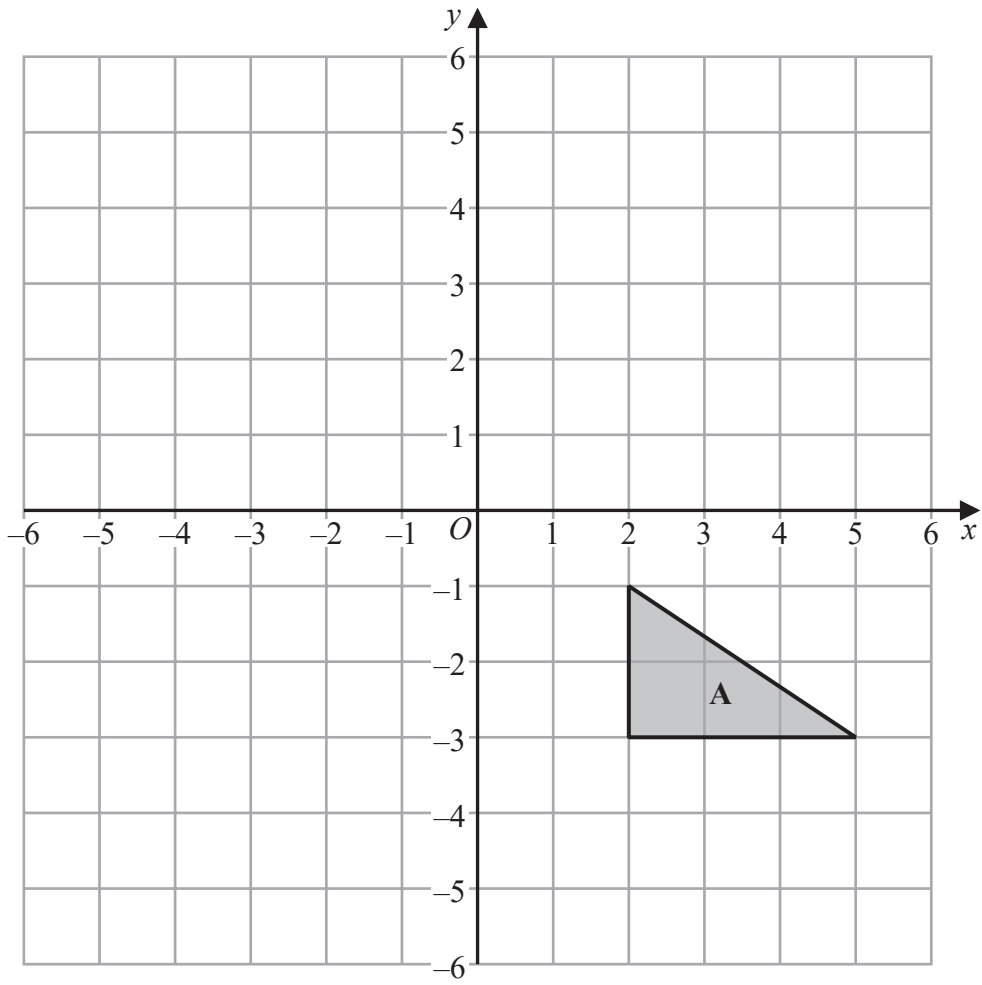
$$p = \dots\dots\dots (2)$$

(b) Make x the subject of the formula $d = 3x + 10$

$$\dots\dots\dots (2)$$

(Total for Question 13 is 4 marks)





(a) On the grid, rotate triangle A 90° anticlockwise about centre O

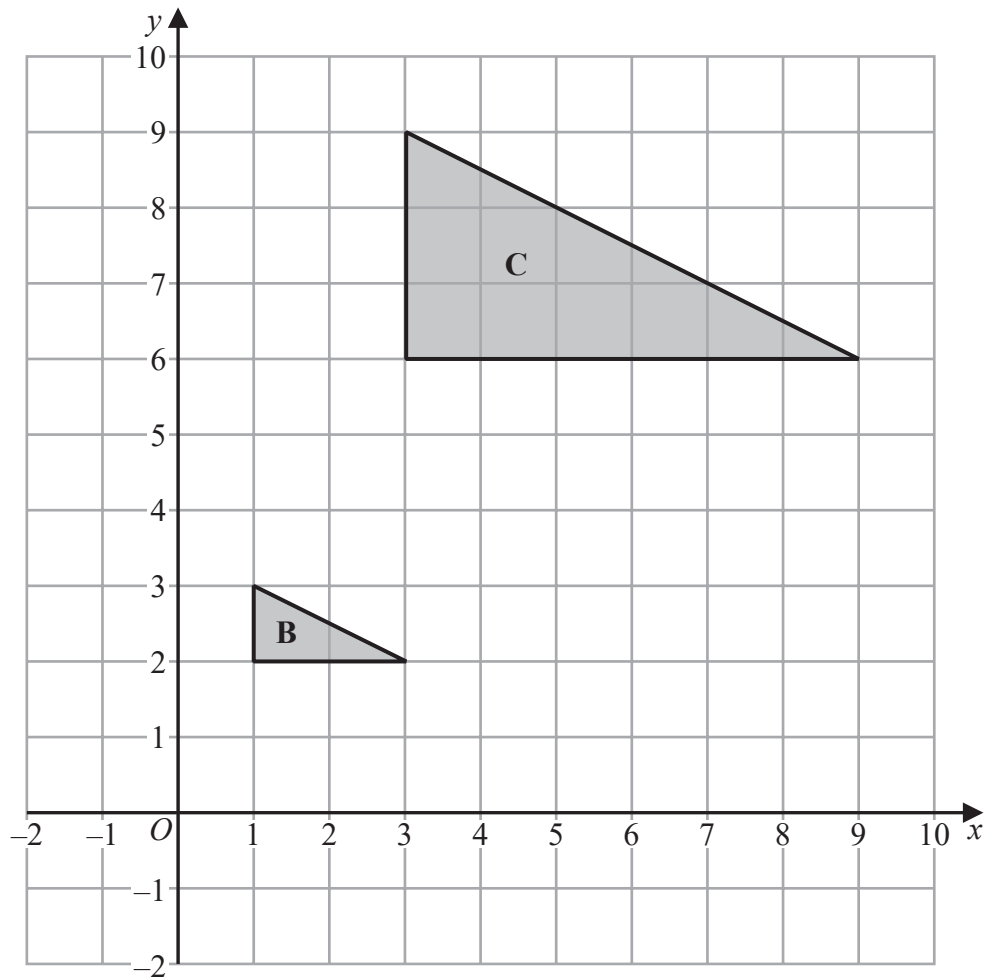
(2)

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(b) Describe fully the single transformation that maps triangle **B** onto triangle **C**

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(2)

(Total for Question 14 is 4 marks)

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P 7 2 4 3 5 A 0 1 7 2 8

- 15 Here is a floor plan of a stage.
The plan is formed from a triangle and a rectangle.

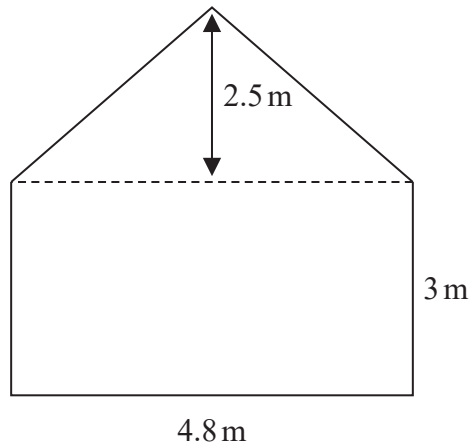


Diagram NOT
accurately drawn

The stage manager is going to paint the floor.

One tin of paint covers an area of 1.8 m^2

One tin of paint costs \$16.40

Paint can only be bought in full tins.

The stage manager has \$190 to spend.

Does the stage manager have enough money to buy enough tins to paint all of the floor?

Show your working clearly.

(Total for Question 15 is 5 marks)



16 80 students entered a dancing competition.

The table gives information about the length of time, in minutes, for which each student spent dancing.

Time (m)	Frequency
$0 < m \leq 12$	11
$12 < m \leq 24$	25
$24 < m \leq 36$	23
$36 < m \leq 48$	15
$48 < m \leq 60$	6

Work out an estimate for the mean length of time the students spent dancing.

..... minutes

(Total for Question 16 is 4 marks)



17 Solve $3(2 - 4x) = 5 - 8x$
Show clear algebraic working.

$x = \dots\dots\dots$

(Total for Question 17 is 3 marks)

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