Bronze Level

Question Paper 7

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Question Paper 7

Time Allowed: 58 minutes

Score: /48

Percentage: /100

Grade Boundaries:

9	8	7	6	5	4	3	2	1
>95%	85%	75%	65%	55%	45%	35%	25%	<25%

1 (a) Expand 6(3a - 2b + c)

(1)

(b) Factorise $t^2 - 10t$

(2)

(c) Solve $x = \frac{7 - 2x}{3}$

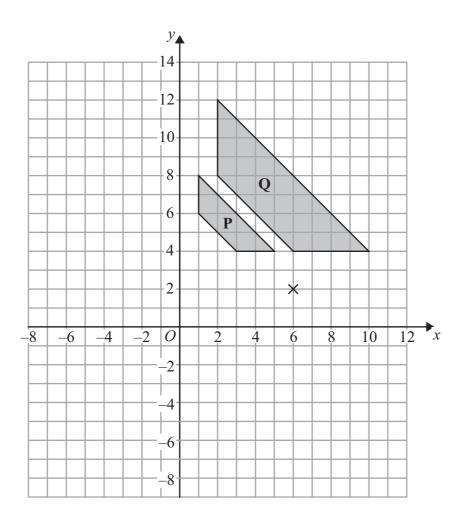
Show clear algebraic working.

x = (3)

(Total for Question 1 is 6 marks)

2 Show that $\frac{4}{9} - \frac{1}{6} = \frac{5}{18}$

3



(a) Describe fully the single transformation that maps shape \mathbf{P} onto shape \mathbf{Q} .

(3)

(b) On the grid, rotate shape $\bf Q$ 180° about the point (6, 2). Label the new shape $\bf R$.

(2)

(Total for Question 3 is 5 marks)

A box contains four different kinds of chocolates. Debbie takes at random a chocolate from the box. The table shows the probability of Debbie taking an Orange or a Coffee or a Caramel chocolate.

Chocolate	Probability
Orange	0.15
Coffee	0.40
Caramel	0.35
Strawberry	

		_	_		
		Orange	0.15		
		Coffee	0.40		
		Caramel	0.35		
		Strawberry			
		e probability that Debbie takes	s a Strawberry chocolate. s an Orange chocolate or a Coffee ch	(2) nocolate.	
			(Total for Question 4 is	(2) s 4 marks)	
5		be made by mixing yellow past litres of green paint.	aint and blue paint in the ratio 2:3		
	Work out how m	any litres of blue paint Wend	y uses.		
				1i	itres
			(Total for Question 5 is	s 2 marks)	

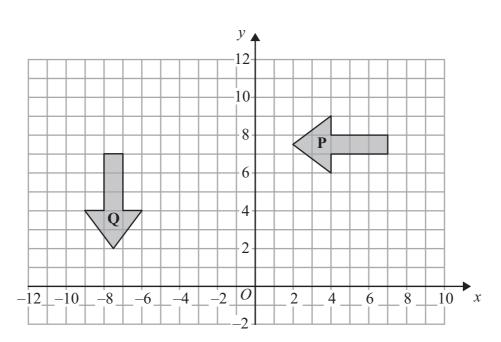
Yoko flew on a plane from Tokyo to Sydney. The plane flew a distance of 7800 km. The flight time was 9 hours 45 minutes.

Work out the average speed of the plane in kilometres per hour.

..... km/h

(Total for Question 6 is 3 marks)

7



(a) Describe fully the single transformation that maps shape P onto shape Q.

(b) On the grid, translate shape **P** by the vector $\begin{pmatrix} -6 \\ 2 \end{pmatrix}$ Label the new shape **R**.

(2)

(3)

(Total for Question 7 is 5 marks)

8 (a) Show that
$$\frac{7}{8} - \frac{5}{6} = \frac{1}{24}$$

(2)

(b) Show that
$$\frac{5}{8} \div \frac{7}{12} = 1\frac{1}{14}$$

(2)

(Total for Question 8 is 4 marks)

9 Solve
$$7y - 6 = 2y + 8$$

Show clear algebraic working.

 $y = \dots$

Express 204 as a product of its prime fa	
	(Total for Question 10 is 3 marks)

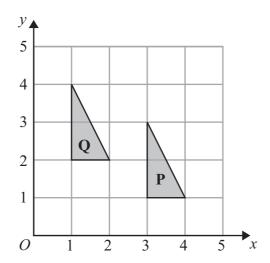
11 There are 20 students in a class. 12 of the students are girls.

Find the ratio of the number of girls to the number of boys. Give your ratio in the form n:1

.....: 1

(Total for Question 11 is 2 marks)

12



Describe fully the single transformation which maps triangle ${\bf P}$ onto triangle ${\bf Q}$.

(Total for Question 12 is 2 marks)

13 (i) Solve the inequalities $3 \le x + 4 < 7$

(ii) n is an integer.

Write down all the values of *n* which satisfy $3 \le n + 4 < 7$

(Total for Question 13 is 4 marks)

14

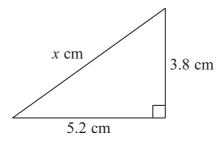


Diagram **NOT** accurately drawn

Calculate the value of *x*.

Give your answer correct to 3 significant figures.

 $\chi = \dots$