Bronze Level

Question Paper 5

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Question Paper 5

Time Allowed: 56 minutes

Score: /46

Percentage: /100

Grade Boundaries:

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

1 Joseph travels to work each day by train.
The weekly cost of his train journey is £45
Joseph's weekly pay is £625

(a) Work out 45 as a percentage of 625

.... %

(2)

(b) The weekly cost of his train journey increases by 8%.

Increase £45 by 8%.

£ ....

(3)

(c) Joseph's weekly pay increases to £640

Calculate the percentage increase from 625 to 640

.... %

(3)

(d) Joseph decides to cycle to work.
He cycles 18 km to work.
His journey to work takes 1 hour 20 minutes.

Calculate his average speed in kilometres per hour.

.... km/h

(3)

(Total for Question 1 is 11 marks)

2
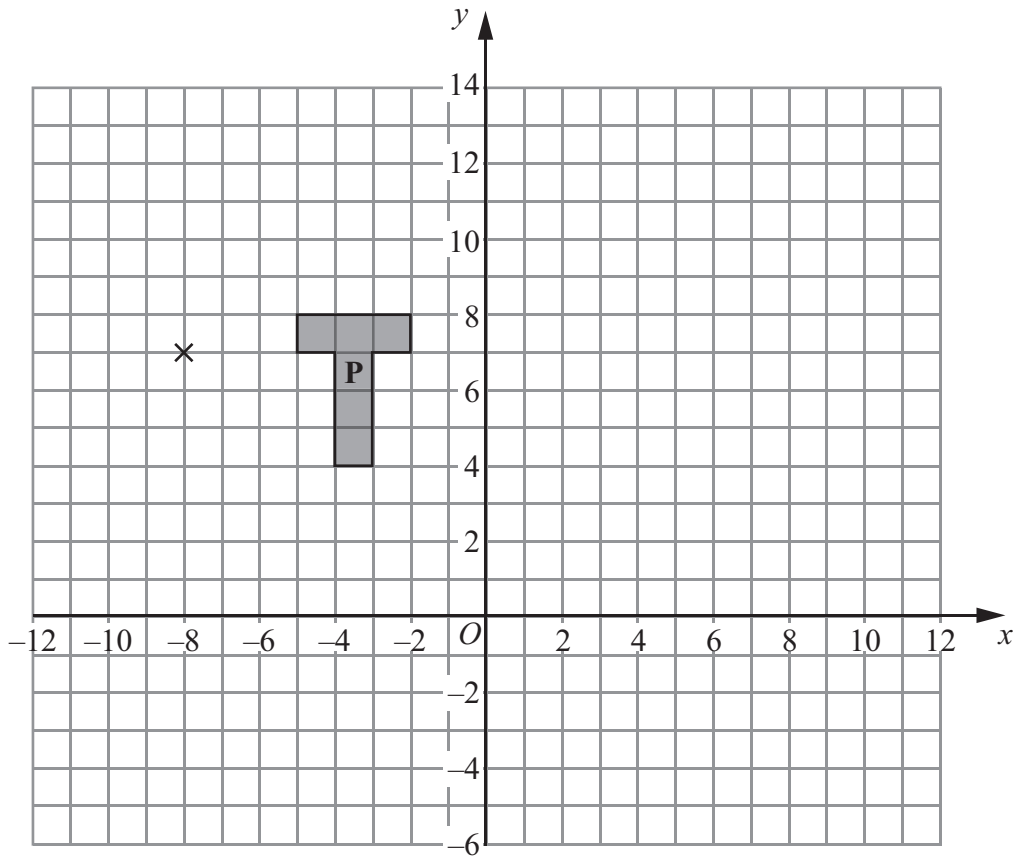
(a) On the grid, enlarge shape **P** with scale factor 3 and centre (−8, 7).
Label the new shape **Q**.

(3)

(b) On the grid, rotate shape **P** through 90° clockwise about the point (−8, 7).
Label the new shape **R**.

(2)

(Total for Question 2 is 5 marks)

3   A school has 60 teachers.

The table shows information about the distances, in km, the teachers travel to school each day.

Distance (*d* km)	Frequency
$0 < d \leqslant 5$	12
$5 < d \leqslant 10$	6
$10 < d \leqslant 15$	4
$15 < d \leqslant 20$	6
$20 < d \leqslant 25$	14
$25 < d \leqslant 30$	18

(a) Write down the modal class.

....

(1)

(b) Work out an estimate for the total distance travelled to school by the 60 teachers each day.

.... km

(3)

(Total for Question 3 is 4 marks)

4   (i) Solve the inequalities $-2 < x + 2 \leqslant 5$

....

(ii) On the number line, represent the solution to part (i).

$$-5 \quad -4 \quad -3 \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5$$
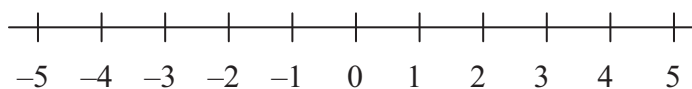
(Total for Question 4 is 4 marks)

5

C

38°

7.9 cm
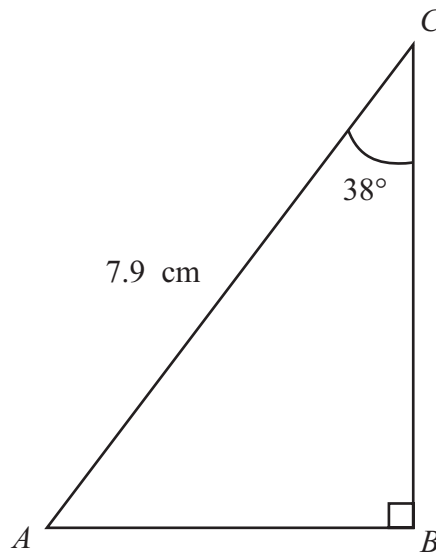
Diagram **NOT**
accurately drawn

A   B

ABC is a triangle.
AC = 7.9 cm
Angle *B* = 90°
Angle *C* = 38°

(a) Calculate the length of *BC*.
   Give your answer correct to 3 significant figures.

.... cm

(3)

(b) The size of angle *C* is 38°, correct to 2 significant figures.

   (i)   Write down the lower bound of the size of angle *C*.

°
....

   (ii) Write down the upper bound of the size of angle *C*.

°
....

(2)

(Total for Question 5 is 5 marks)

You must write down all the stages in your working.

6 (a) Use your calculator to work out the value of

$$\frac{8.7 + 2.8}{1.4^2}$$

Give your answer as a decimal.
Write down all the figures on your calculator display.

....

(2)

(b) Give your answer to part (a) correct to 2 significant figures.

....

(1)

(Total for Question 6 is 3 marks)

7 A circle has a diameter of 7.6 cm.
Work out the circumference of the circle.
Give your answer correct to 3 significant figures.

.... cm

(Total for Question 7 is 2 marks)

8   The table shows information about the marks of 20 students in a science test.

Mark	Frequency
6	2
7	4
8	5
9	8
10	1

Work out the mean mark of the 20 students.

....

(Total for Question 8 is 3 marks)

9   Abid is waiting for a bus.
The probability that his bus will be early is 0.2
The probability that his bus will be on time is 0.7

Work out the probability that his bus will be either early or on time.

....

(Total for Question 9 is 2 marks)

10 $\mathscr{E} = \{\text{even numbers}\}$
$A = \{2, 4, 6, 8, 10\}$

(a) B is a set such that $A \cap B = \{4, 8\}$
The set B has 3 members.

List the members of one possible set B.

....

(2)

(b) C is a set such that $A \cap C = \emptyset$
The set C has 3 members.

List the members of one possible set C.

....

(1)

(Total for Question 10 is 3 marks)

11

16 cm

10 cm

4 cm

9 cm
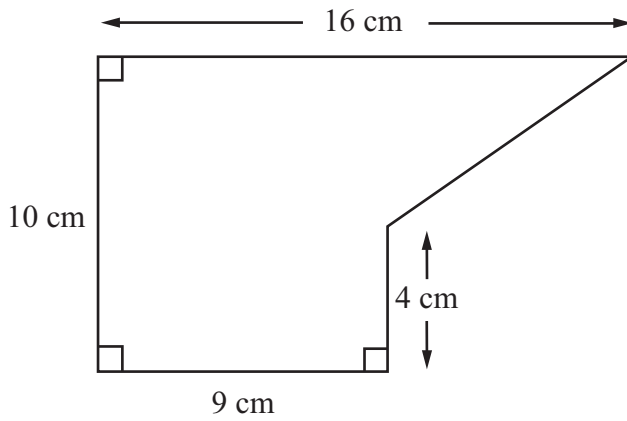
Diagram **NOT**
accurately drawn

The diagram shows a shape.

Work out the area of the shape.

.... cm^2

(Total for Question 11 is 4 marks)