Bronze Level

Question Paper 18

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Question Paper 18

Time Allowed: **59 minutes**

Score: **/49**

Percentage: **/100**

Grade Boundaries:

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

1 (a) Factorise $3y^2 + 2y$

.....

(1)

(b) Expand and simplify $(x - 9)(x + 2)$

.....

(2)

(c) (i) Solve $6k + 5 < 20$

.....

(ii) n is an integer and $6n + 5 < 20$

Write down the largest possible value of n

.....

(3)

(d) Simplify fully $\dfrac{28x^5y^3}{4xy^2}$

.....

(2)

(Total for Question 1 is 8 marks)

2

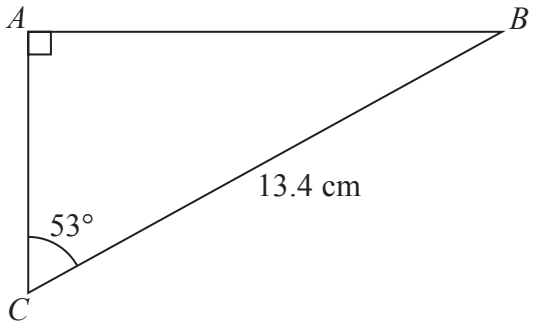

Diagram **NOT** accurately drawn

Work out the length of *AB*.
Give your answer correct to 1 decimal place.

..... cm

(Total for Question 2 is 3 marks)

3 Rafael and Roger played tennis against each other 30 times.
Each of the times they played, either Rafael won or Roger won.
The ratio of the number of times Rafael won to the number of times Roger won is 7 : 3

(a) Work out the number of times Rafael won.

.....

(2)

In a school, there are 75 girls in the tennis squad.
The ratio of the number of boys in the tennis squad to the number of girls in the tennis squad is 4 : 3

(b) Work out the number of boys in the tennis squad.

.....

(2)

(Total for Question 3 is 4 marks)

4 (a) Factorise fully $2x^2 - 4x$

.....

(2)

$A = 2p + 3q$

(b) Work out the value of p when $A = 32$ and $q = 7$

$p =$ .....

(3)

(Total for Question 4 is 5 marks)

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5 There are 50 marbles in a bag.
35 of the marbles are brown.

Otti takes at random a marble from the bag.
He records the colour of the marble and puts the marble back in the bag.

He does this 300 times.

Work out an estimate for the number of brown marbles he takes.

.....

(Total for Question 5 is 2 marks)

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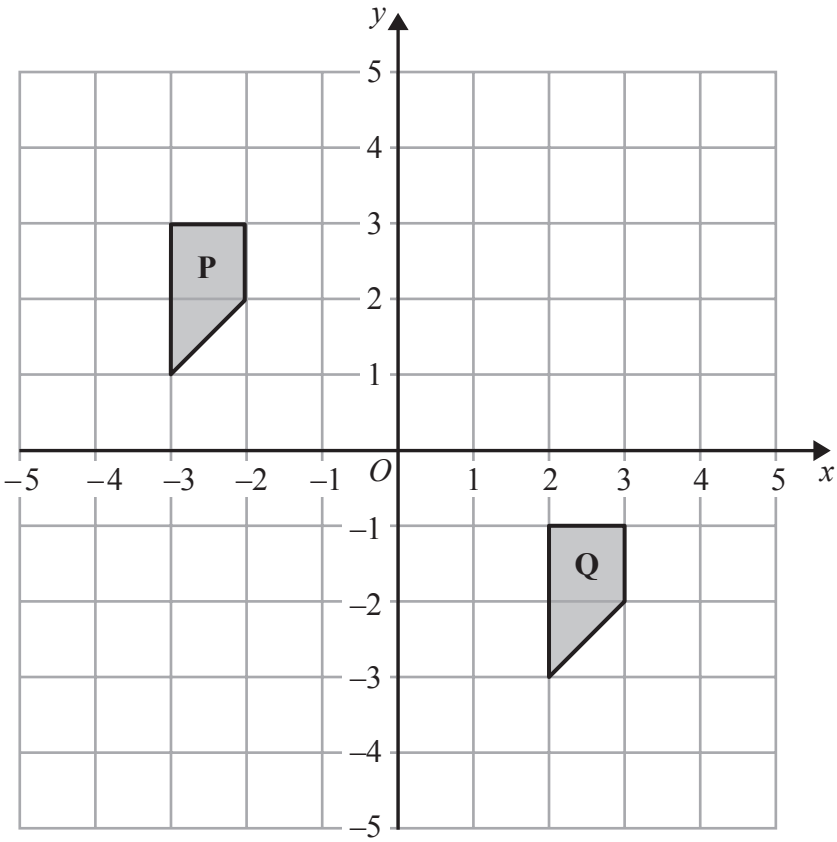
6 Write 792 as a product of its prime factors.
Show your working clearly.

.....

(Total for Question 6 is 3 marks)

7



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

.....

.....

(2)

(b) Rotate shape **Q** 90° clockwise about (1, 0)
Label the new shape **R**.

(2)

(Total for Question 7 is 4 marks)

8 Li throws a 6-sided biased dice once.

The table shows the probability that the dice will land on 1, 2, 3, 5 or 6

Number	1	2	3	4	5	6
Probability	0.15	0.1	0.05		0.2	0.15

(a) Work out the probability that the dice will land on 4

.....

(2)

(b) Work out the probability that the dice will land on an odd number.

.....

(2)

(Total for Question 8 is 4 marks)

9 Julie asked 50 children how many exercise sessions they each took part in last month.
The table shows information about her results.

Number of exercise sessions	Frequency
0 to 6	13
7 to 13	10
14 to 20	16
21 to 27	7
28 to 34	4

Calculate an estimate for the total number of exercise sessions the children took part in last month.

.....

(Total for Question 9 is 3 marks)

10 (a) Simplify fully $\dfrac{a^{11}}{a^2 \times a^5}$

.....

(2)

(b) Make p the subject of $p + 4q = 3p + 5$

.....

(2)

(c) Expand and simplify $(2y + 3)(4y - 1)$

.....

(2)

(d) Simplify $(8a^6b^3)^{\frac{1}{3}}$

.....

(2)

(Total for Question 10 is 8 marks)

11 Here are the first five terms of an arithmetic sequence.

7 10 13 16 19

Find an expression for the nth term of the sequence.

.....

(Total for Question 11 is 2 marks)

12 Solve $8y - 18 = 3(y + 3)$
Show clear algebraic working.

$y =$ .....

(Total for Question 12 is 3 marks)