

Bronze Level

Question Paper 2

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Question Paper 2

Time Allowed: 60 minutes

Score: /50

Percentage: /100

Grade Boundaries:

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

1 (a) Simplify

(i) $a \times a \times a \times a$,

.....

(ii) $5a \times 6b$,

.....

(iii) $q^8 \div q^2$.

.....

(3)

(b) Solve $5 - 2y = 12$

$y =$

(2)

(c) $v = w^2 - 2w$.

Work out the value of v when $w = 6$

$v =$

(2)

(Total for Question 1 is 7 marks)

- 2 Use compasses and a ruler only to construct the perpendicular bisector of the line PQ .
You must show all construction lines.



3 The length of a fence is 137 metres, correct to the nearest metre.

Write down

(i) the lower bound for the length of the fence,

..... metres

(ii) the upper bound for the length of the fence.

..... metres

(Total for Question 3 is 2 marks)

4 Express 126 as a product of its prime factors.

.....

(Total for Question 4 is 3 marks)

5

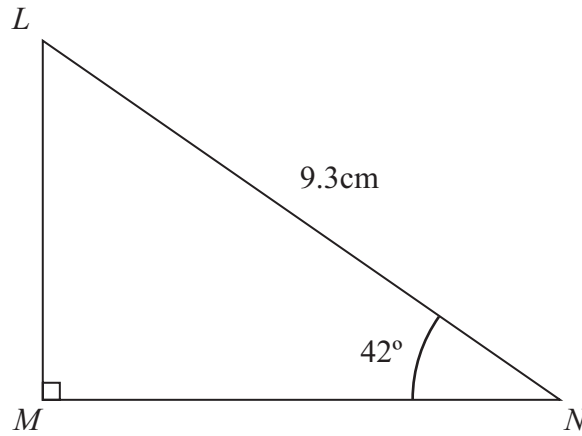


Diagram **NOT**
accurately drawn

Calculate the length of LM .
Give your answer correct to 3 significant figures.

..... cm

(Total for Question 5 is 3 marks)

6 In January 2007 the population of Canada was 32 million.
7 million of these Canadian people spoke French as their first language.

- (a) Express 7 million as a percentage of 32 million.
Give your answer correct to 1 decimal place.

..... %
(2)

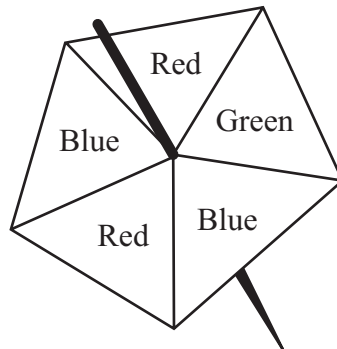
Between January 2007 and January 2009 the population of Canada increased by 4%.

- (b) Increase 32 million by 4%.
Give your answer correct to the nearest million.

..... million
(3)

(Total for Question 6 is 5 marks)

7 Here is a fair 5-sided spinner.



Hans spins the spinner 30 times.

Work out an estimate for the number of times the spinner lands on Red.

.....
(Total for Question 7 is 2 marks)

8

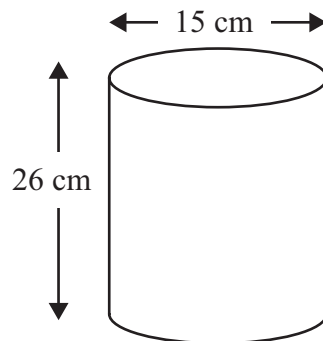


Diagram NOT accurately drawn

A cylinder has a diameter of 15 cm and a height of 26 cm.

Work out the volume of the cylinder.

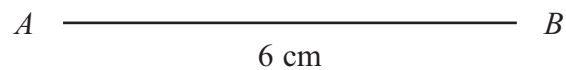
Give your answer correct to 3 significant figures.

..... cm³

(Total for Question 8 is 3 marks)

- 9 The lengths of the sides of a rhombus are 6 cm.
The length of the longer diagonal of the rhombus is 10 cm.
 AB is a side of the rhombus.

Construct an accurate, full-size drawing of the rhombus.
You must show all construction lines.



10 (a) Factorise $5a - 3a^2$

.....
(2)

(b) Expand

(i) $2(4 - 3w)$

(ii) $y^2(y + 10)$

.....
(3)

(c) $W = \frac{5.6a}{b^2}$

$a = 1.28 \quad b = 0.8$

Work out the value of W .

$W =$
(2)

(Total for Question 10 is 7 marks)

- 11 (a) $\mathcal{E} = \{\text{Students in Year 12}\}$
 $G = \{\text{Students who study German}\}$
 $F = \{\text{Students who study French}\}$
 $M = \{\text{Students who study Maths}\}$

(i) $G \cap M = \emptyset$

Use this information to write a statement about the students who study German in Year 12

- (ii) Preety is a student in Year 12
Preety $\notin F$.

Use this information to write a statement about Preety.

(2)

- (b) $A = \{2, 4, 6, 8, 10\}$
 $A \cap B = \{2, 4\}$
 $A \cup B = \{1, 2, 3, 4, 6, 8, 10\}$

List all the members of set B .

(2)

(Total for Question 11 is 4 marks)

12 The table shows information about the numbers of text messages sent by 40 teenagers in one day.

Number of text messages	Number of teenagers	Mid-interval value	
0 to 2	3	1	
3 to 5	6	4	
6 to 8	10		
9 to 11	15		
12 to 14	5		
15 to 17	1		

(a) Write down the modal class.

.....
(1)

(b) (i) Work out an estimate for the mean number of texts sent by the 40 teenagers in one day.

.....
(ii) Explain why your answer to part (b)(i) is an estimate.

.....
(5)

.....
(Total for Question 12 is 6 marks)

13 Work out the value of $\frac{6.7 - 2.5}{2.8 \times 0.4}$

Give your answer as a decimal.

.....
(Total for Question 13 is 2 marks)