



FORM 4

MATHEMATICS
Main Paper

TIME: 1 hr 40 mins

Question	1	2	3	4	5	6	7	8	9	10	11	12	Main	NC	Global Mark
Mark															

DO NOT WRITE ABOVE THIS LINE

Name: _____

Class: _____

INSTRUCTIONS TO CANDIDATES:

Read all the questions carefully before you start answering.

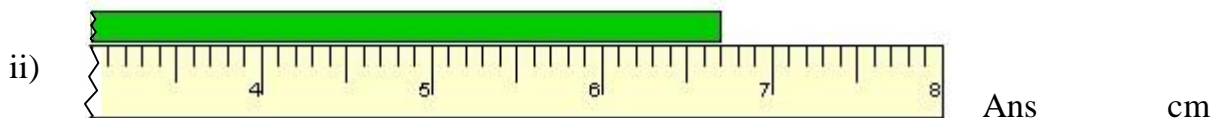
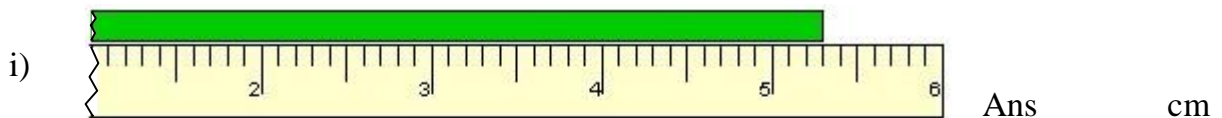
- Answer all questions.
- This paper carries 80 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.

1. a) Write in **order**, starting from the smallest.

2.45, 24.5, 0.245, 0.254, 2.54

Ans _____

b) Write the following measurements:



(5 marks)

2. Round:

a) 27.87 to the **nearest whole number** Ans _____

b) 568 to the **nearest ten** Ans _____

c) 4326 to the **nearest hundred** Ans _____

d) 0.0648 to **two decimal places** Ans _____

e) 326.258 to **one significant figure** Ans _____

(5 marks)

3. Use your **calculator** to work out:

a) $24 \times (8.4 + 1.6)$ Ans _____

b) $\frac{3.6 + 4.4}{4}$ Ans _____

c) $\frac{3.6}{4} + 4.4$ Ans _____

(3 marks)

4. Fill in using the following numbers. Numbers can only be used **once**.

6, 7, 8, 9, 10

a) _____ is a **prime** number.

b) _____ is a **factor of 20**.

c) _____ is a **multiple** of 4.

d) _____ is a **square** number.

e) _____ is a **common multiple** of 2 and 3.

(5 marks)

5. Work out the size of the lettered angles.

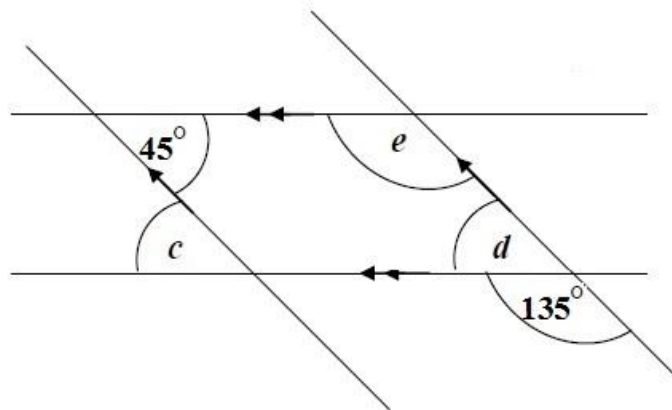
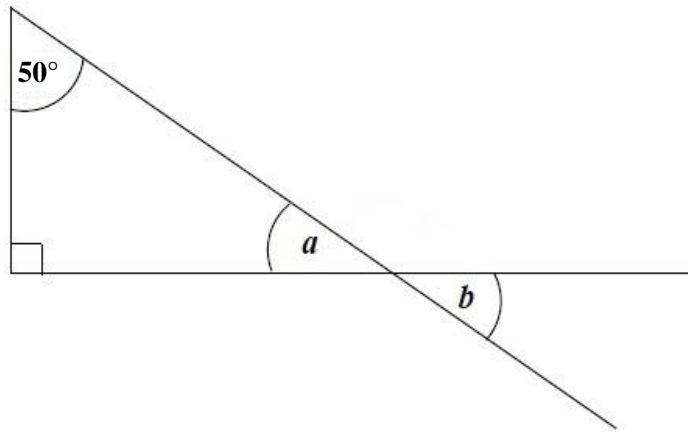
$a =$ _____ °

$b =$ _____ °

$c =$ _____ °

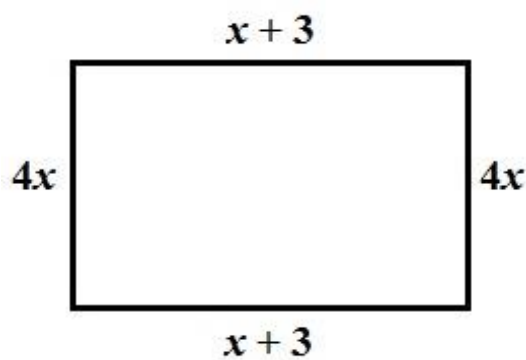
$d =$ _____ °

$e =$ _____ °



(5 marks)

6. a) Write down and simplify an **expression for the perimeter** of this rectangle.



Ans _____

b) Work out the **perimeter** of the rectangle when $x = 2$.

Ans _____

(5 marks)

7. For each house in Valletta Road, the postman counts the number of letters delivered in a week. These are as follows:

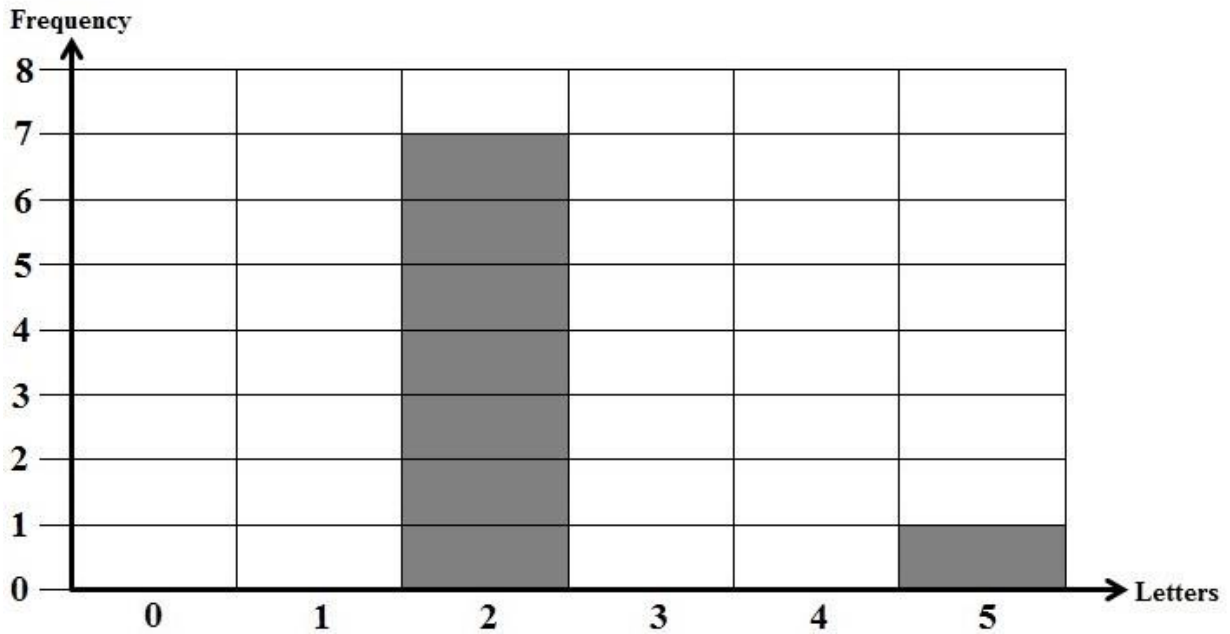
0 3 2 5 1 1 1 1 4 2 3
 2 2 2 4 1 3 2 2 4 1 0



a) Continue this **frequency table**.

Letters	Tally	Frequency
0		
1		
2	/	7
3		
4		
5		1
	Total	

b) Continue this **bar chart** to show the above information.



(9 marks)

8. **Formula-One Taxi** company calculates the cost of a trip using this formula:

$$\text{Cost in Euro} = 5 + (2 \times \text{length of trip in kilometres})$$



- a) Calculate the cost of a 6 km trip using **Formula-One Taxi** company.

Ans € _____

- Turtle-Two Taxi** company calculates the cost of a trip using this formula:

$$\text{Cost in Euro} = 3 \times \text{length of trip in kilometres}$$



- b) Calculate the cost of a 6 km trip using **Turtle-Two Taxi** company.

Ans € _____

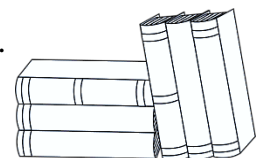
- c) Which taxi company is **cheaper** for a 6 km trip, and by how much?

Ans: _____ is cheaper by € _____
(8 marks)

9. a) **Fill in:**

i) $6.25 \text{ m} = \text{_____ cm}$ (ii) $6 \text{ l} = \text{_____ ml}$

- b) A book has a mass of 200 g. The mass of an empty box is 400 g.
What is the **total mass in kg** of a box containing 6 books?

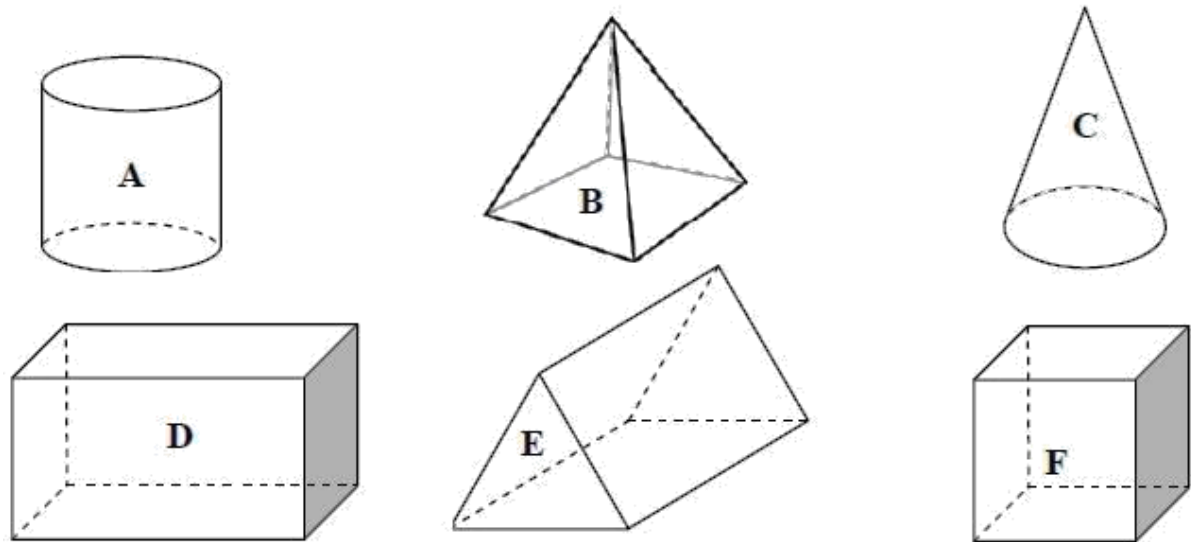


Ans _____ kg

- c) The box containing the 6 books was placed on a shelf which can hold a **maximum of 2 kg**. How many more books can be added?

Ans _____ books
(8 marks)

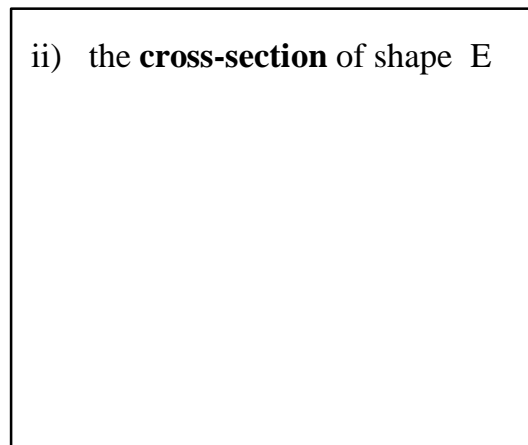
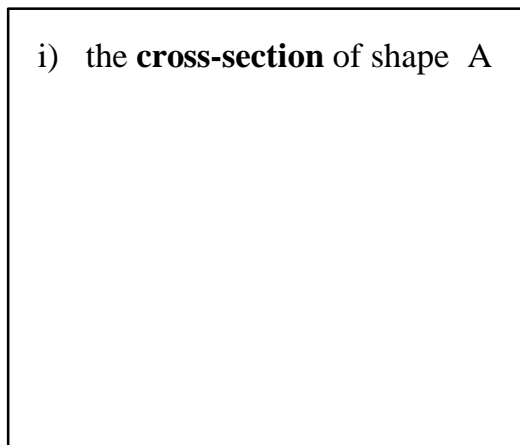
10.



a) Which of the above shapes are **prisms**? (*Underline more than one*)

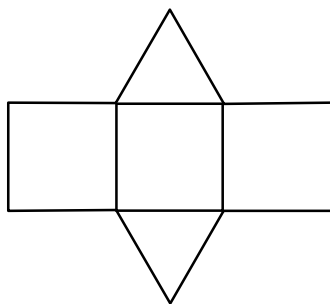
A	B	C	D	E	F
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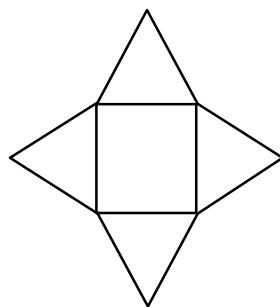
b) Draw:

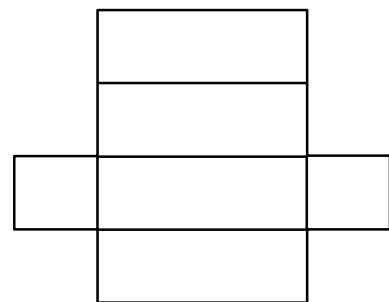


c) Under each of these nets, write the name of its corresponding shape.
Choose from:

Cuboid	Prism	Pyramid
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(9 marks)

11. a) Draw the **lines of symmetry** of the following car logos.

i)



ii)



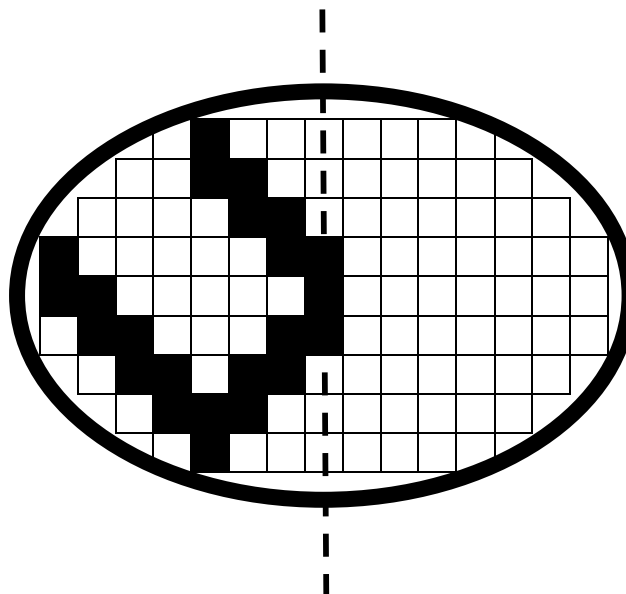
b) Fill in:



i) This shape has a **rotational symmetry** of order ____.

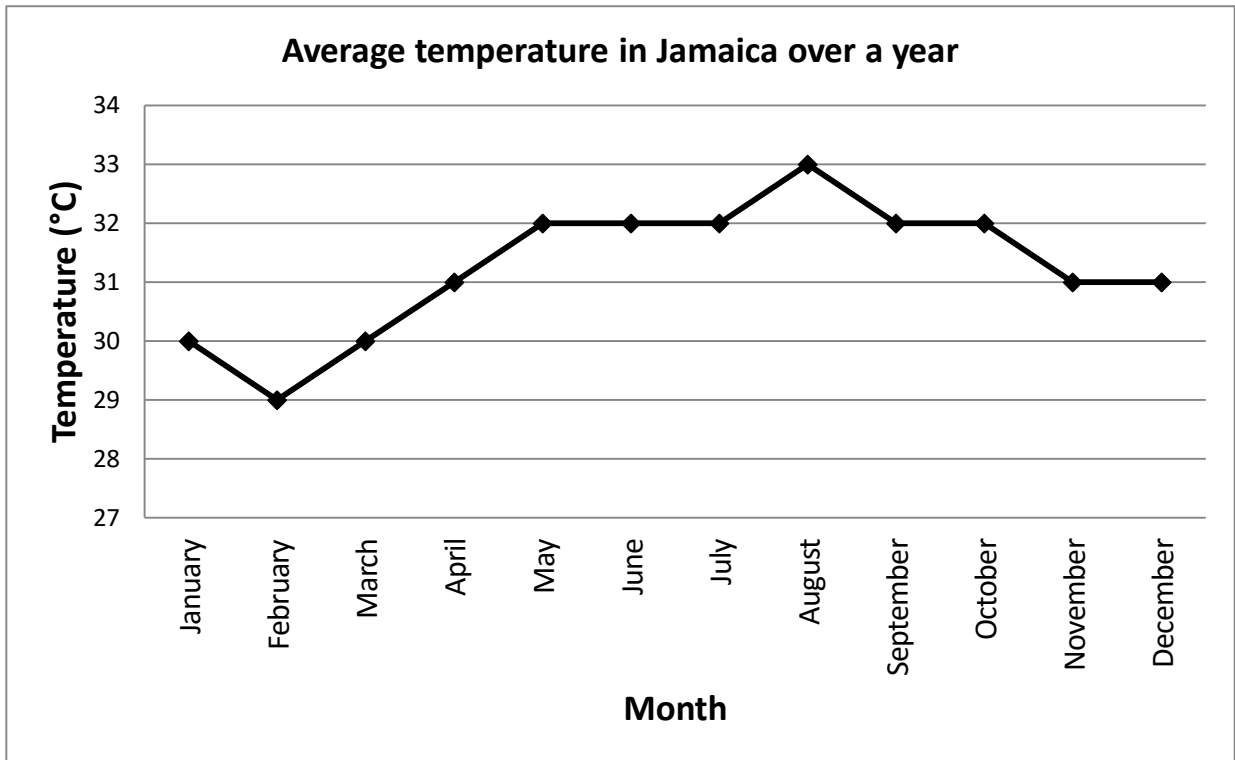
ii) This shape has a **rotational symmetry** of order ____.

c) Complete this diagram so that the **dotted line is a line of symmetry**.



(7 marks)

12.



a) Use the above line graph to **complete** the following table.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
30	29				32	32	33	32	32		31

b) In how many months was the temperature **higher than 31 °C**? _____ months

c) What is the **mode** for these temperatures? _____ °C

d) Which month had the **highest** temperature? _____

e) Which month was the **coldest**? _____

f) What is the **range** of these temperatures? _____ °C

g) Work out the **mean** temperature of Jamaica for all the 12 months?
(Give your answer correct to 1 decimal place)

_____ °C

h) If you had to go to Jamaica, which month would you choose? Explain your answer by referring to the above graph.

(11 marks)

END OF EXAM