

FORM 3

MATHEMATICS SCHEME C
Non Calculator Paper

TIME: 30 minutes

Name: _____

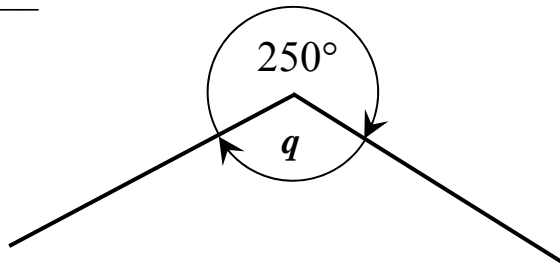
Class: _____

Question	1	2	3	4	5	6	7	8	9	Total
Mark										

INSTRUCTIONS TO CANDIDATES

- Answer all questions.
- This paper carries a total of 25 marks.
- Calculators and protractors are NOT ALLOWED.

1 Angle $q =$ _____ $^{\circ}$



(1 mark)

2 Fill in.

a) 3 hours = _____ minutes

b) _____ *litres* = 5000 *ml*

(2 marks)

3 Fill in.

25% of ~~€~~80 = € _____

(2 marks)

4 Complete this **multiplication grid**.

\times	75	4.2
10		42
100	7500	

(2 marks)

- 5 The table shows the **test marks** of 5 students.

Name	Mark
Bertu	7
Gorg	5
Anna	5
Toni	4
Mari	9

- a) **Median** = _____
- b) Work out the **mean (average)** mark.

Mean (average) = _____

(3 marks)

- 6 a) Work out.

$$100 - 30 \times 3 = \underline{\hspace{2cm}}$$

- b) A car travels **240 km** in **4 hours**. Work out the **speed** of the car.



Speed = _____ km/h

(3 marks)

- 7 Fill in.

a) $\frac{5}{8} - \frac{3}{8} = \frac{\hspace{1cm}}{8} = \frac{\hspace{1cm}}{4}$

b) $\frac{3}{10} + \frac{1}{5} = \frac{3}{10} + \frac{\hspace{1cm}}{10} = \frac{\hspace{1cm}}{10} = \frac{1}{\hspace{1cm}}$

(4 marks)

- 8 a) This LOGO statement draws a **rectangle**.

PD REPEAT 2 [FD 200 RT 90 FD 120 RT 90]

Work out the **perimeter** of this **rectangle**.

Perimeter = _____ turtle steps

- b) The **area** of the rectangle is **30 cm²**.
Work out the **length** of this rectangle.

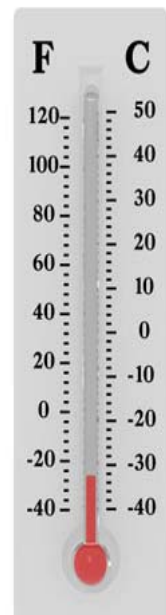


Length = _____ cm

(4 marks)

- 9 Complete the table.

	Temperature (°C)	Goes	New Temperature (°C)
a	5	down 8°C	-3
b	10	down 5°C	
c	-3	up 10°C	
d	-6	up 4°C	
e	-3		-5



(4 marks)

FORM 3

MATHEMATICS

TIME: 1h 30min

Main Paper

1	2	3	4	5	6	7	8	9	10	11	12	13	14	NC	Main	Total

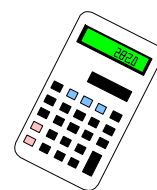
Name: _____

Class: _____

**Calculators are allowed but the necessary working must be shown.
 Answer all questions.**

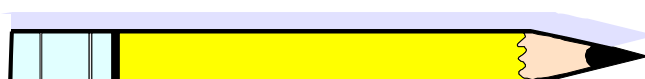
1 Use your **calculator** to **divide 200** by **3**. Write your answer correct to

- a) the **nearest whole number** _____
- b) **two decimal places** _____



(2 marks)

2 a) Use your **ruler** to find the **length** of this pencil.



Length = _____ cm

- b) **When new**, the pencil was **double** the length it is now. Work out the length of the pencil when it was new.

Length = _____ cm

(3 marks)

- 3 a) Fill in.

$$\frac{3}{4} = \underline{\hspace{2cm}} \%$$

- b) A dress costs **€125**.
Work out the **SALE price**.

Sale price = €



(4 marks)

- 4 a) **Underline** the correct answer.

i) The sum of the **three angles of a triangle** is (**90°, 180°, 360°**).

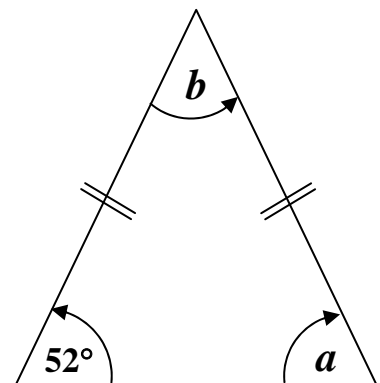
ii) A **hexagon** has (**6, 8, 10**) sides.

- b) The diagram shows an **isosceles triangle**.

Fill in.

$$a = \underline{\hspace{2cm}}^\circ$$

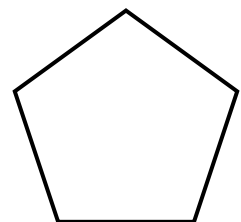
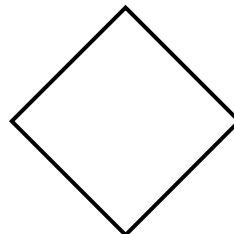
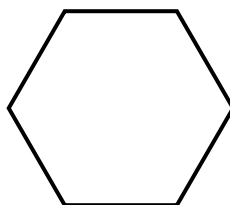
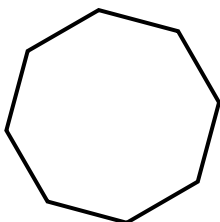
$$b = \underline{\hspace{2cm}}^\circ$$



(4 marks)

- 5 Write the correct name. Use the words below.

SQUARE, PENTAGON, HEXAGON, OCTAGON



(4 marks)

Name: _____

Class: _____

6 Match the **equation** to its **solution**.

	Equation		Solution
a	$x + 6 = 10$		$x = 10$
b	$x - 7 = 2$		$x = 4$
c	$3x = 15$		$x = 9$
d	$x \div 2 = 5$		$x = 1$
e	$5x - 2 = 3$		$x = 5$

(4 marks)

7 Match the **event** to the **probability**.

Event	Probability
When you throw a fair coin you get a HEAD.	impossible
It will be a school holiday on Christmas day.	unlikely
When I grow up I will be 10 metres tall.	evens
It will rain in summer in Malta.	likely
England will beat Malta in football.	certain

(4 marks)

8 a) Use **ruler and compasses only** to draw an **equilateral triangle** with sides **6 cm**.

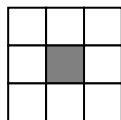
b) Fill in.

Each angle of this triangle = _____°

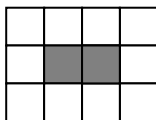
(4 marks)

- 9 a) Write down the **missing numbers**.
- i) **4, 8, 12, 16, _____, 24, 28, _____**
- ii) **64, 32, 16, 8, _____, 2, 1, _____**

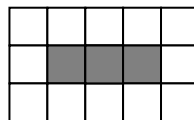
- b) i) Draw **Pattern 4**.



Pattern 1



Pattern 2



Pattern 3

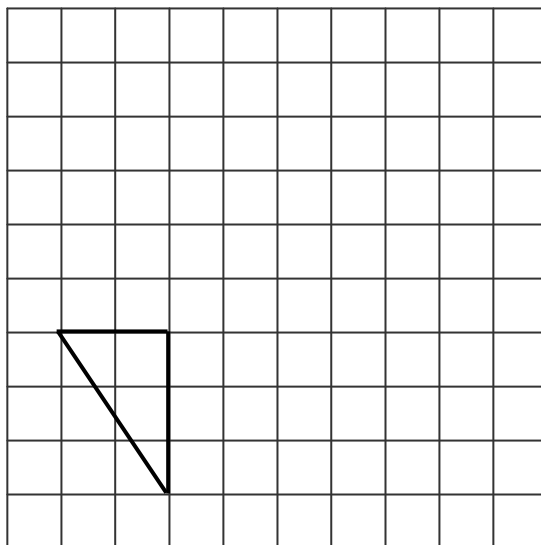
Pattern 4

- ii) Fill in.

In **Pattern 10** there are _____ **shaded squares** and _____ **white squares**.

(8 marks)

- 10 a) **Enlarge** the triangle. Use a ratio of **1 : 3**.

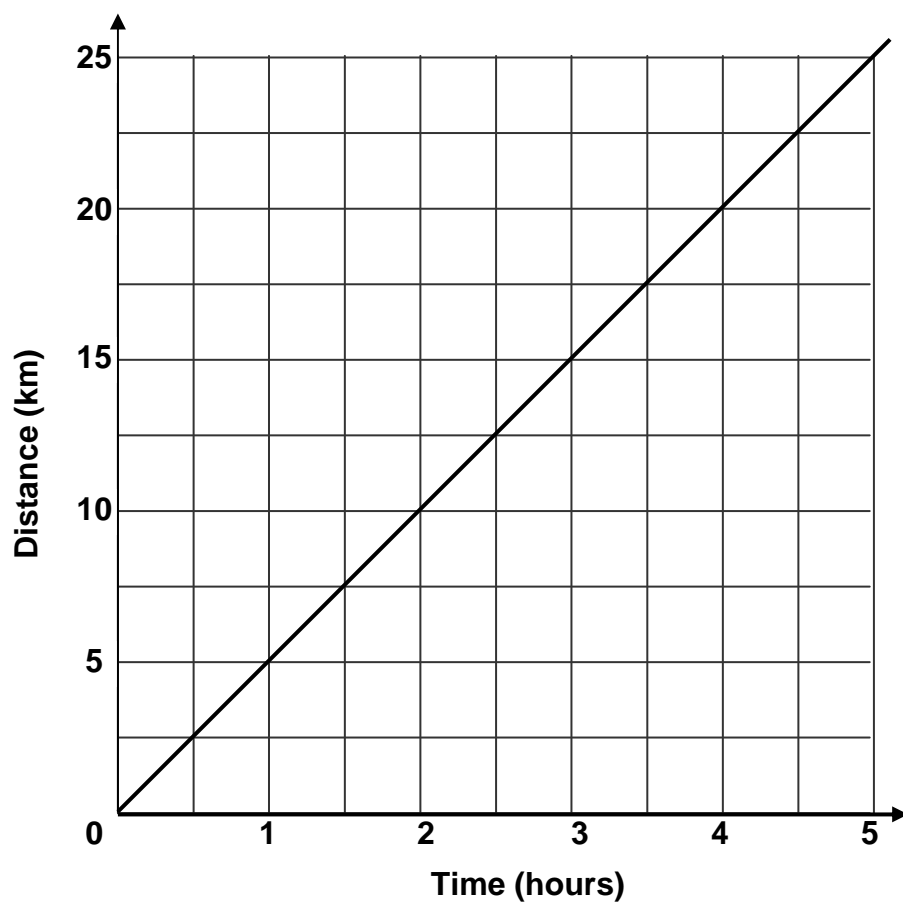


- b) Fill in.

- i) **Area of small triangle** = _____ cm^2
- ii) **Area of enlarged triangle** = _____ cm^2
- iii) **Area of small triangle : Area of enlarged triangle** = 1 : _____

(7 marks)

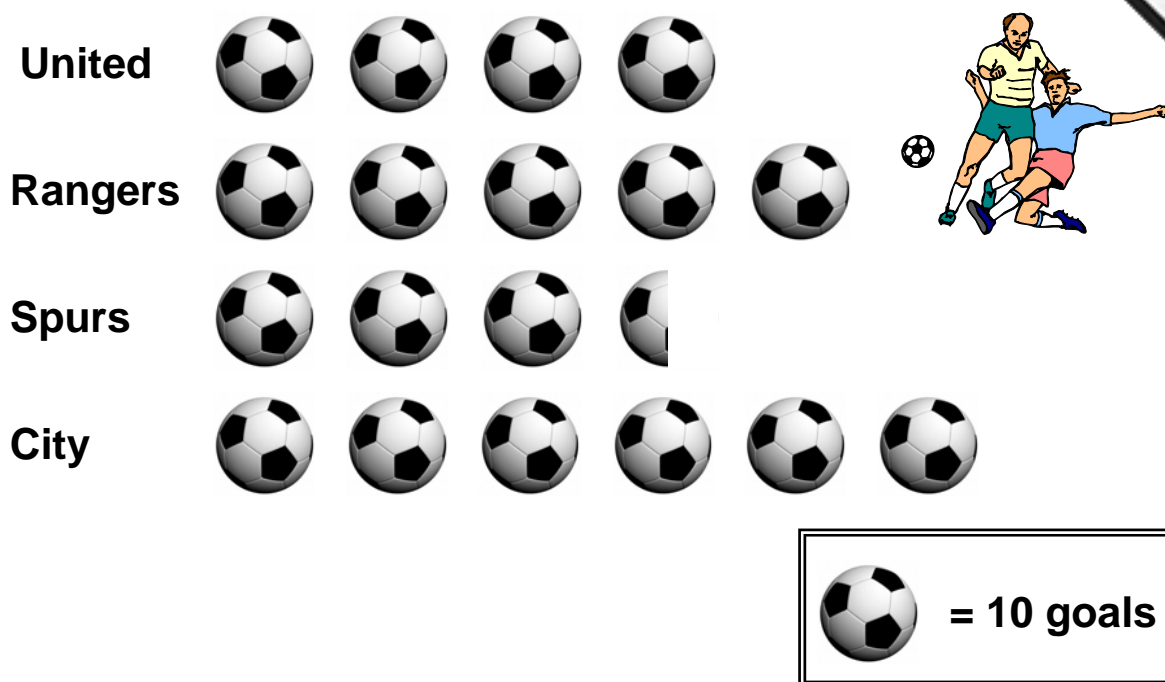
- 11 This graph shows the distance a boy walks in a given time.



- a) Use this graph to fill in.
- i) In **3 hours** the boy walks _____ kilometres.
 - ii) In _____ hours the boy walks **20 km**.
 - iii) In $2\frac{1}{2}$ **hours** the boy walks _____ kilometres.
 - iv) In _____ hours the boy walks **40 km**.
- b) **Speed** = _____ km/h

(7 marks)

12 The pictogram shows the **number of goals** scored by four teams.



- a) **Underline** the correct answer.
- i) (United, Rangers, Spurs, City) scored **most goals**.
 - ii) Rangers scored (5, 10, 25, 50) goals.
 - iii) (United, Rangers, Spurs, City) scored 40 goals.
 - iv) Spurs scored (10, 30, 35, 40) goals.
- b) i) How many goals did **City** score? _____ goals
- ii) City played **20 matches**. Work out the mean (**average**) number of goals scored per match.

Average = _____ goals

(7 marks)

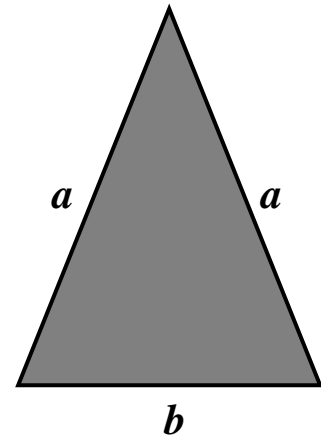
- 13 a) Underline the correct answer.

A triangle with **no equal sides** is (scalene, equilateral, isosceles).

- b) Mario uses the formula

$$\text{Perimeter} = 2a + b$$

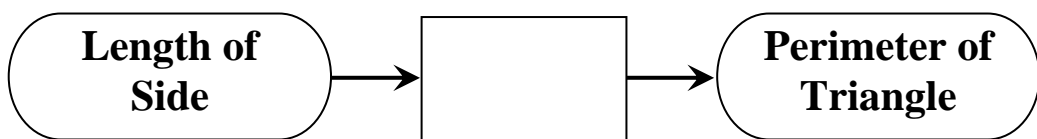
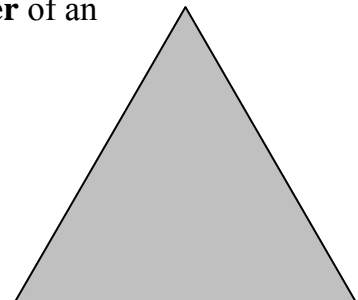
to find the **perimeter** of an **isosceles triangle**.



Complete the table.

a	b	Perimeter
7	5	
	4	22

- c) Katrina uses this number machine to find the **perimeter** of an **equilateral triangle**.
Complete the number machine.

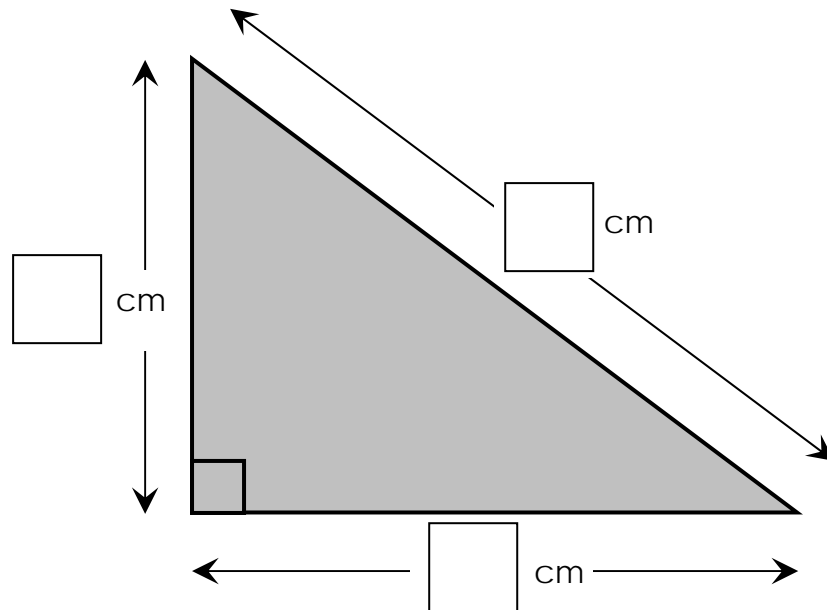


- d) The **perimeter** of an equilateral triangle is 27 cm. Work out the length of **one of its sides**.

Length = _____ cm

(8 marks)

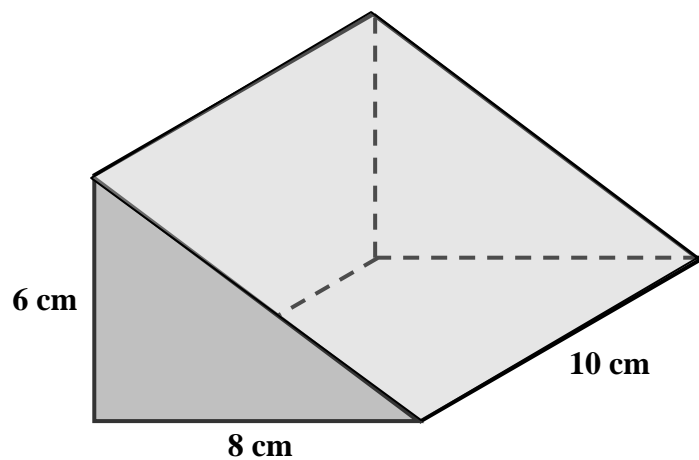
- 14 a) **Measure** the **sides** of the **triangle**.
Fill in the missing measurements.



- b) Work out the **perimeter** and **area** of the **triangle**.

Perimeter = _____ cm **Area** = _____ cm²

- c) Work out the **volume** of this prism.



Volume = _____ cm³

(9 marks)