

Annual Examinations for Secondary Schools 2022

YEAR 9

MATHEMATICS
Main Paper

TIME: 45 minutes

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total Main	Non Calc	Total
Mark																	

DO NOT WRITE ABOVE THIS LINE

Name: _____

Class: _____

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

1. (a) Fill in using these units:

kilograms	centimetres	kilometres	litres
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- (i) The distance between Malta and Gozo is measured in _____.
- (ii) The weight of a baby is measured in _____.
- (iii) The capacity of a water tank is measured in _____.

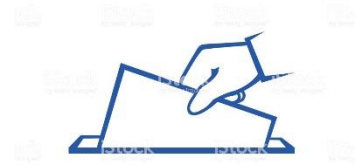
- (b) Paul has 54 cm length of wire.
He cuts the wire in pieces, 9 cm long.
How many pieces of wire does he get?

Ans: _____ pieces
(5 marks)

2. In a school council election, 200 students vote.

(a) Peter gets 25% of the votes.

How many votes does Peter get?



Ans: _____ votes

(b) Rita gets $\frac{4}{10}$ of the votes.

How many votes does Rita get?

Ans: _____ votes

(c) Susan gets the rest of the votes.

How many votes does Susan get?

Ans: _____ votes

(d) Who wins the election?

Ans: _____

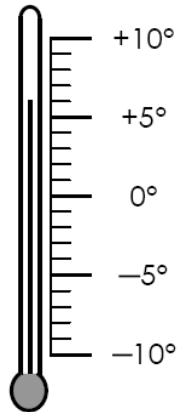
(7 marks)

3. (a) Circle the **warmer** temperature:

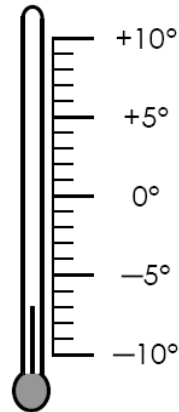
(i) -4°C or 3°C

(ii) -5°C or -9°C

(b) Write the temperature shown on the thermometer:



(i) _____ $^{\circ}\text{C}$



(ii) _____ $^{\circ}\text{C}$

(4 marks)

4. (a) (i) Continue the number pattern, by writing two more numbers:

41, 44, 47, 50, _____, _____.

(ii) The rule for this sequence is:

Start with _____ and _____ three each time.

(b) The rule for another sequence is:

Start with 66 and subtract two each time.

Write down the first five numbers of this sequence.

_____, _____, _____, _____, _____.

(6 marks)

5. Samuel asked his classmates about their favourite sport.

KEY:  = 2 students

	    
Basketball	  
Volleyball	
Tennis	 
	

(a) Fill in the pictogram using the following information.

- (i) Four students like volleyball.
- (ii) Rugby is the least favourite sport in the class.
- (iii) Football is the most favourite sport in the class.

(b) How many students like basketball?

Ans: _____ students

(c) How many students are there in all?

Ans: _____ students

(6 marks)

6. Round:

(a) 67 to the nearest ten.

Ans: _____

(b) 243 to the nearest hundred.

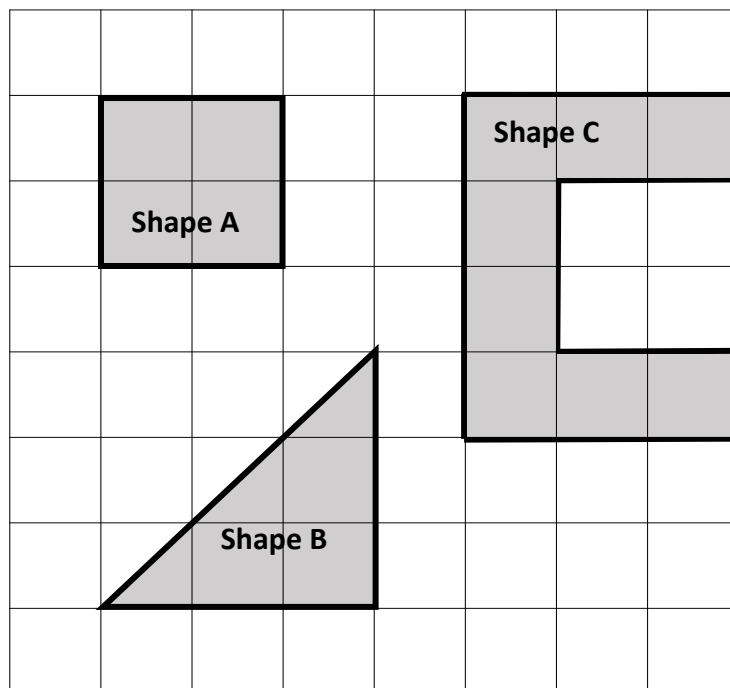
Ans: _____

(c) €45.78 to the nearest euro.

Ans: € _____

(3 marks)

7. Each square has side of length one unit.



(a) Name these shapes:

(i) Shape A: _____

(ii) Shape B: _____

(b) Find the **perimeter** of Shape C.

Ans: _____ units

(c) Find the **area** of Shape C.

Ans: _____ square units

(d) Underline the correct answer:

(i) The area of Shape C is (half, equal, double) to that of Shape A.

(ii) Shape B is (scalene, equilateral, right angled).

(iii) The perimeter of Shape B is (larger than, smaller than, equal to) the perimeter of Shape C.

(9 marks)

8. (a) Jean works **mornings only**.



She starts work at the time shown on the clock.

Write this time in 24-hour clock.

Ans: _____

(b) Jean works till 11:00 a.m.

(i) Draw the hands to show the time on the clock below.



(ii) How many hours does Jean work in a day?

Ans: _____ hours

(c) She gets paid €5.50 an hour.

(i) How much money will she earn in one day?

Ans: € _____

(ii) How many days does she have to work to earn €66?

Ans: _____ days

(9 marks)

9. Here is a set of five cards. Kate picks a card.



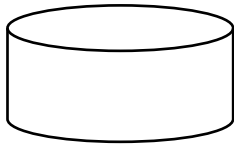
Tick (✓) True or False:

- (a) It is very likely that she picks an odd number.
- (b) It is very unlikely that she picks an even number.
- (c) It is certain that she picks a number greater than 10.

True	False
☐	☐
☐	☐
☐	☐

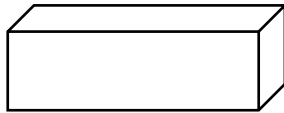
(3 marks)

10. Match the following shapes with their names.



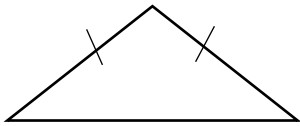
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• Equilateral triangle



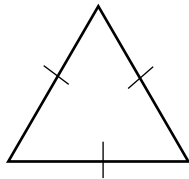
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• Cylinder



•

• Cuboid



•

• Isosceles triangle

(3 marks)

11. Fill in:

(a) $2678 = 2000 + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

(b) $4.586 \text{ kg} = \underline{\hspace{2cm}} \text{ g}$

(d) $13.5 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

(e) $20 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

(6 marks)

12. (a) Draw a circle centre O radius 4 cm.

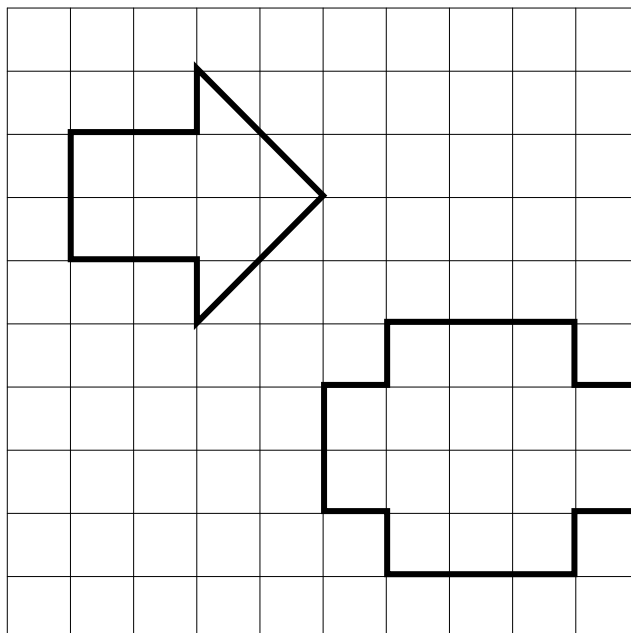
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O

(b) On your circle, draw a diameter.

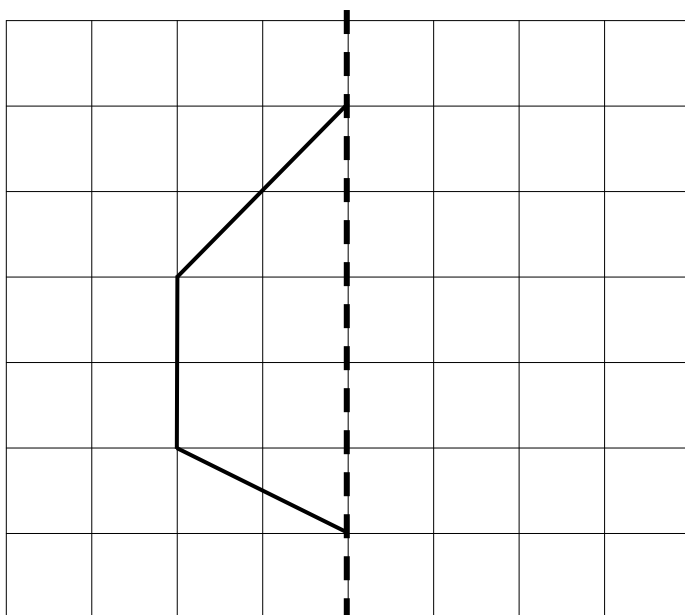
(c) On your circle label the circumference with the letter **C**.

(4 marks)

13. (a) Draw the lines of symmetry of these shapes.



(b) Complete this shape using the dotted line as a line of symmetry:



(6 marks)

14. (a) Peter stands facing West.

He turns half a turn.

In which direction is he facing now?



Ans: _____

(b) Anna stands facing South.

She turns quarter of a turn clockwise.

In which direction is she facing now?

Ans: _____

(4 marks)

END OF PAPER

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