



Annual Examinations for Middle Schools 2023

YEAR 7

MATHEMATICS

TIME: 1h 30min

Main Paper

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

DO NOT WRITE ABOVE THIS LINE

Name: _____ Class: _____

**Answer ALL questions.
Calculators are allowed. All necessary working must be shown.**

1. a) Write down the value of the digit 2 in these numbers.

243 _____

782 _____

95.2 _____

- b) Fill in with $<$, $>$ or $=$.

493 439

$\frac{3}{4}$ 75%

21.9 21.09

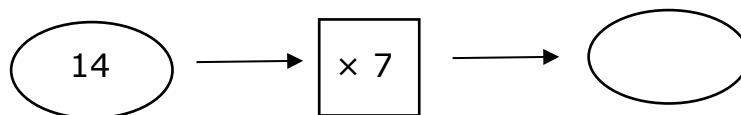
- c) Round 858 to the nearest hundred.

Ans: _____

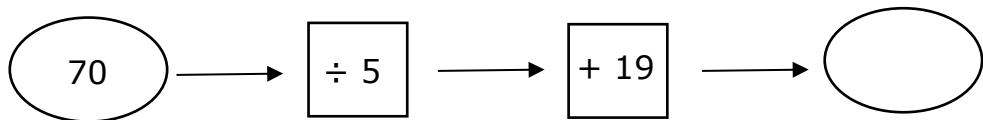
(7 marks)

2. a) Work out the number machines.

i)



ii)



b) Find the value of the following when $a = 3$ and $b = 5$.

i) $a + 7$

Ans: _____

ii) $3b - 9$

Ans: _____

iii) $6a - 2b$

Ans: _____

(8 marks)

3. Match the correct probability statements.

Jack throws a dice. He gets:

a) an even number

unlikely

b) a decimal number

evens

c) a multiple of 4

certain

d) a number less than 7 but greater than 0

impossible

(4 marks)

4. Sophie is baking cupcakes for her friends. She bakes 30 cupcakes to share equally among her seven friends.

a) How many whole cupcakes does each friend get?



Ans: _____ cupcakes

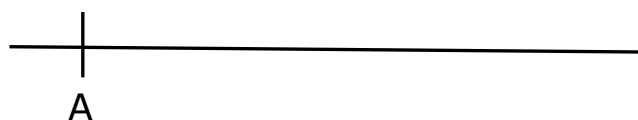
Sophie keeps the remaining cupcakes for herself.

b) How many cupcakes does she keep?

Ans: _____ cupcakes

(4 marks)

-
5. a) Draw an angle of 65° at point A.

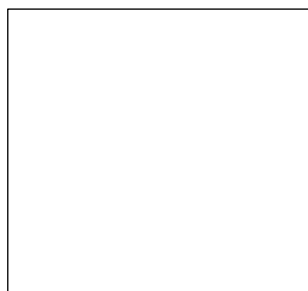


b) Angle A is an _____ (acute, obtuse) angle.

c) In the space provided, sketch:



a right angle



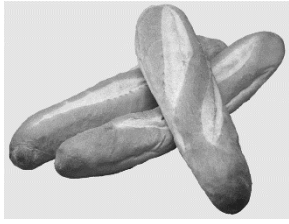
a reflex angle



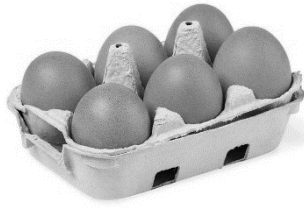
an obtuse angle

(6 marks)

6. It is Jeffrey's turn to prepare breakfast. Below is a list of the items he needs to buy.



3 baguettes
€0.65 each



1 box of eggs
€2.30 per box



1 carton of milk
€1.15 each



2 tins baked beans
€0.70 each

- a) Find the cost of two tins of baked beans.

Ans: €_____

- b) Find the cost of three baguettes.

Ans: €_____

- c) Calculate the total amount Jeffrey spends to buy all the items in his list.

Item	Cost
3 baguettes	
1 box of eggs	
1 carton of milk	
2 tins baked beans	
Total	

Ans: €_____

- d) Jeffrey pays with a €10 note. Work out the change given.

Ans: €_____

(8 marks)

7. a) Complete: half an hour = _____ minutes

b) Write the time 6:25 am in words.

c) Use the calendar for May 2023 to answer the questions below.

May 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Lucy is a hairdresser. She works every day from Tuesday to Saturday.

i) Calculate the number of days that Lucy worked in the month of May.

Ans: _____ days

ii) There were _____ Mondays in May.

iii) Lucy's birthday was on the 3rd of June.

On which day of the week was her birthday? _____

(5 marks)

8. a) A cube has _____ faces and _____ vertices.

b) The shape is made up of 1 cm cubes.

Calculate the volume of the shape.

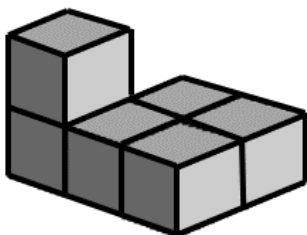


Diagram not drawn to scale

Ans: _____ cm³

(3 marks)

9. a) Rectangle A has a length of 8 cm and breadth of 5 cm.
Work out the area of rectangle A.

Ans: _____ cm^2

- b) Rectangle B has the same area as rectangle A but with different lengths.
Suggest one possible length and breadth for rectangle B.

length: _____ cm

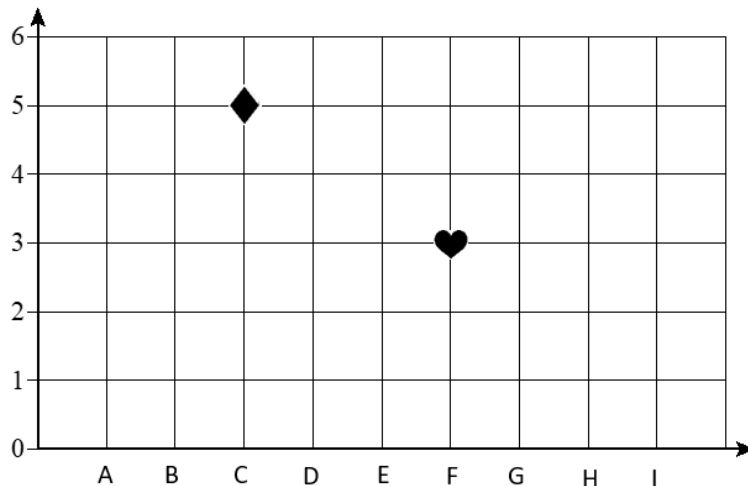
breadth: _____ cm

- c) Rectangle _____ has the smaller perimeter.

Show your working to support your answer.

(7 marks)

10. Below is a grid showing the position of two objects.



- a) Draw a circle • in position (B, 1).
b) The position of the heart ♥ is _____.
c) The position of the diamond ♦ is _____.
d) i) Move the diamond ♦ 5 to the right and 3 down. Draw its new position.
ii) The new position is _____.

(6 marks)

11. Gerry sells the following ice creams in one hour.

Vanilla	Strawberry	Vanilla	Mint
Chocolate	Nocciola	Vanilla	Strawberry
Chocolate	Strawberry	Strawberry	Chocolate
Mint	Chocolate	Nocciola	Chocolate

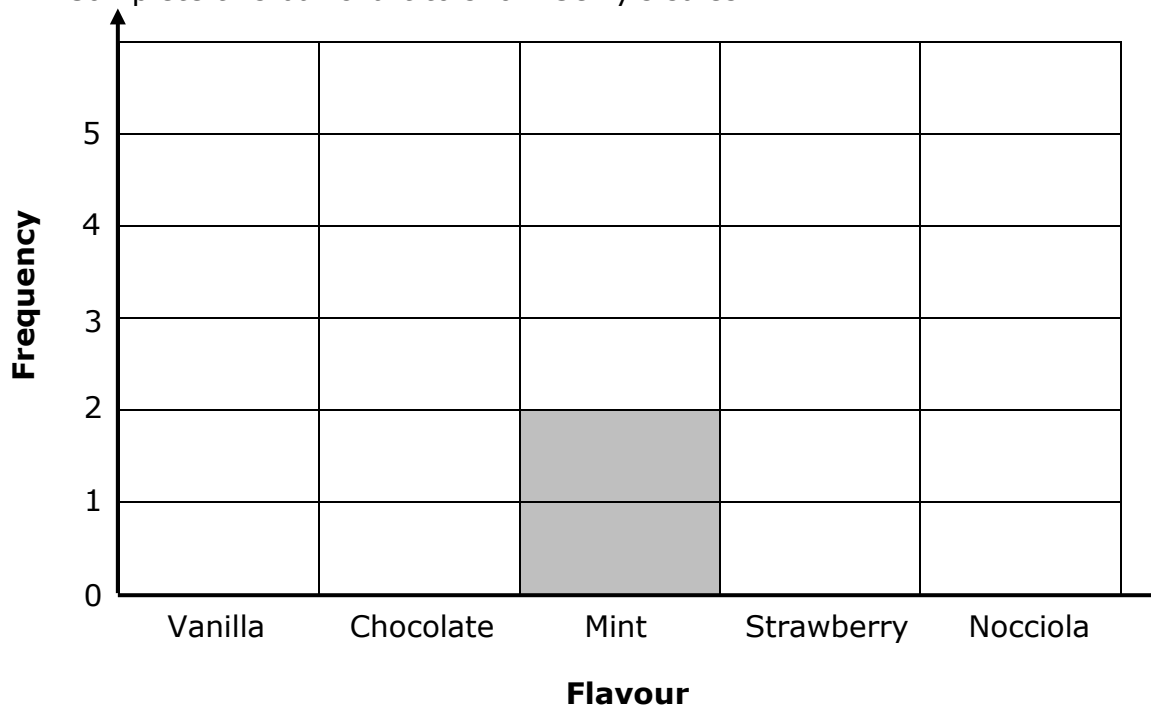
- a) Complete the following frequency table.

Flavour	Vanilla	Chocolate	Mint	Strawberry	Nocciola
Frequency			2		

- b) How many ice creams does Gerry sell during this hour?

Ans: _____ ice creams

- c) Complete this bar chart to show Gerry's sales.

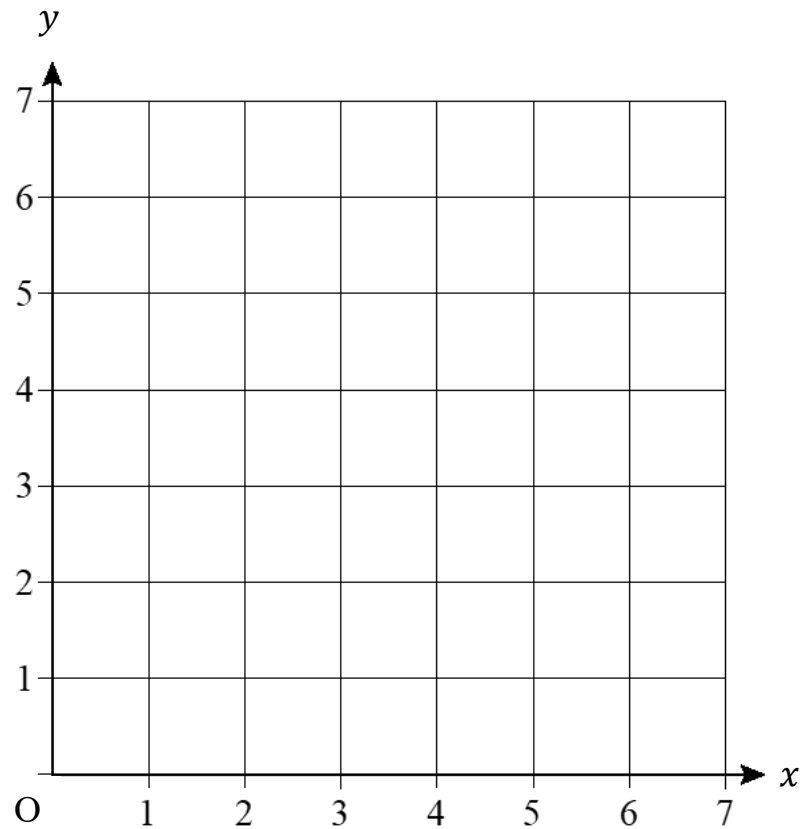


- d) Which flavour makes up 25% of the ice creams sold? _____
- e) Each ice cream costs €2.70. How much money does Gerry collect from selling these ice creams?

Ans: € _____

(11 marks)

12.



- a) Plot the points A(2, 1), B(6, 1), C(7, 3), D(4, 5) and E(1, 3).
- b) Join A to B, B to C, C to D, D to E and E to A to form a shape.
Shape ABCDE is called a _____.
- c) Underline the correct answer in the brackets:
Shape ABCDE is (a regular / an irregular) shape.

(6 marks)

End of Main Paper