

END OF PRIMARY BENCHMARK

2019

MATHEMATICS

WRITTEN PAPER

80 marks

1 hour 30 minutes

1. Work out.

a) $150 + 150 =$ _____ <input data-bbox="534 528 807 645" type="text"/>	b) $301 - 289 =$ _____ <input data-bbox="1174 528 1447 645" type="text"/>
c) $23 \times 14 =$ _____ <input data-bbox="531 1003 804 1120" type="text"/>	d) $408 \div 4 =$ _____ <input data-bbox="1174 1003 1447 1120" type="text"/>

(4 marks)

2. 1 and 2 are common factors of 12 and 36.

Which are the **other four common factors** of **both 12 and 36**?

1	2				
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(4 marks)

3. Work out.

a) $0.56 \times 10 =$

b) $36 \div 100 =$

c) $630 \div 7 = 10 \times$

(4 marks)

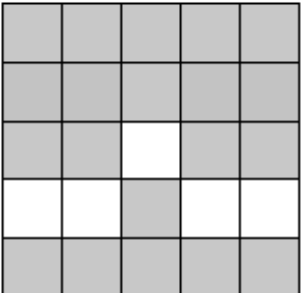
4a) Tick (✓) two cards that give a total of 5.

$\frac{4}{5}$	$2\frac{1}{3}$	$1\frac{4}{5}$	$2\frac{1}{5}$	$3\frac{1}{3}$	$3\frac{1}{5}$
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b) Look at each of these shapes.

What percentage is shaded?

i)  %

ii)  %

(4 marks)

5. At a fun park, Bumper Cars tickets cost 75c each.



a) Fill in:

75c = 3 coins of _____ c + 1 coin of _____ c + 1 coin of _____ c

b) How much do 10 Bumper Cars tickets cost?

Show your working here.

€

c) Gary spends €3 on Bumper Cars tickets.

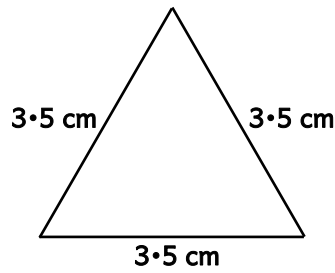
How many tickets does Gary buy?

Show your working here.

tickets

(5 marks)

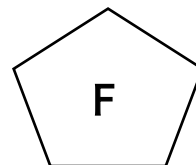
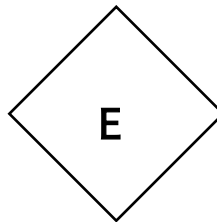
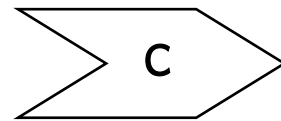
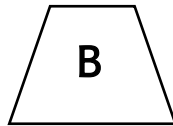
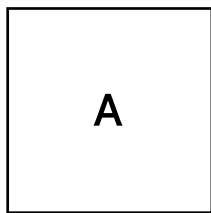
6a) Sara says that this shape is an **isosceles triangle**.



Continue the following sentence.

Sara is wrong because _____
_____.

b) Fill in the **Carroll Diagram** by writing the letter of every shape in its correct position.



	Regular Polygons	Irregular Polygons
Polygons that have one or more right angles		
Polygons that have no right angles		

(5 marks)

7. The table below shows the **mass** (weight) of 4 boxes.

Box A	2.805 kg
Box B	0.786 kg
Box C	3456 g
Box D	$\frac{1}{4}$ kg



- a) Work out the **mass** of **all 4 boxes**.
Give your answer in kilograms and grams.

Show your
working here.

kg g

- b) Box _____ weighs less than 1 kilogram but more than $\frac{1}{2}$ a kilogram.
- c) Work out the **difference** in **mass** between the **heaviest** box and the **lightest** box.
Give your answer in grams.

Show your
working here.

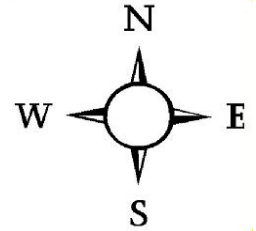
grams

(5 marks)

8a) You are facing North.

You turn **2 right angles clockwise**.

In which **direction** are you facing now?



b) You are facing **South West**.

You turn **225° anticlockwise**.

In which **direction** are you facing now?

c) You turned **1 right angle clockwise**.

Now you are facing **North East**.

In which **direction** were you facing before the turn?

(5 marks)

9. Look at the number cards below.

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Use the number cards only **once** to make:

a) a **two-digit square number** which is also a multiple of 9.

b) a number which rounds to **3460** when rounded to the nearest 10.

c) a **3-digit number** which is exactly divisible by 3.

(5 marks)

10. Max has €200 in his wallet.

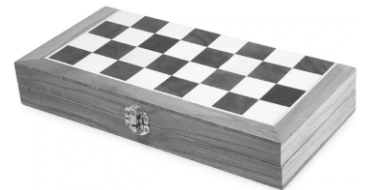
- a) He spends $\frac{2}{5}$ of his money on headphones.
How much does Max spend on headphones?



Show your
working here.

€

- b) Then he spends $\frac{1}{4}$ of the remainder on a game.
How much does Max spend on the game?

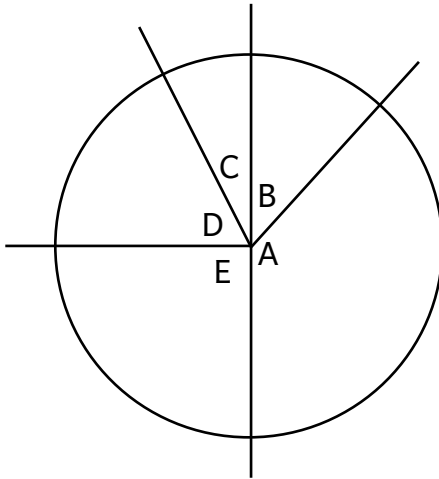


Show your
working here.

€

(5 marks)

11. Look at the diagram below.



a) Angle A is 142° .

i) Angle A is an _____ angle.

ii) Without using a protractor, work out the size of Angle B.

Show your
working here.

o

b) Angle D is 58° .

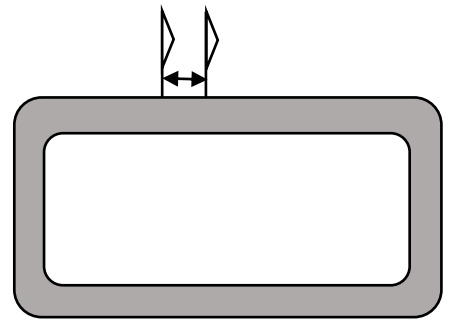
Without using a protractor, work out the size of Angle C.

Show your
working here.

o

(5 marks)

12. **26 flags** are placed **around** a sports track.
The **distance between any two flags** is **18.5 m**.

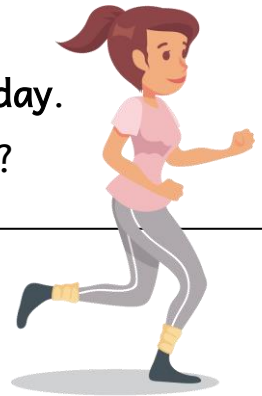


- a) What is the **perimeter** of the track?

Show your working here.

m

- b) Mary runs around the sports track for **40 minutes every day**.
How long, in **hours and minutes**, does Mary run in **7 days**?



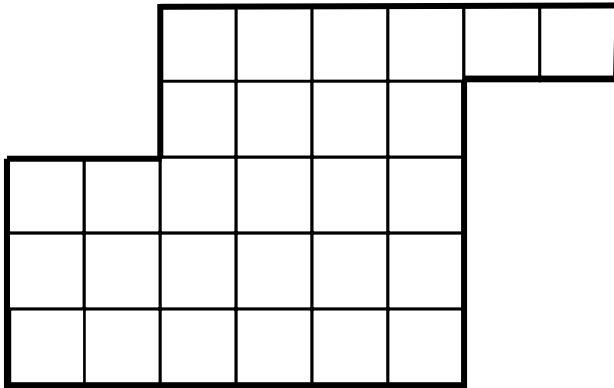
Show your working here.

hours

minutes

(5 marks)

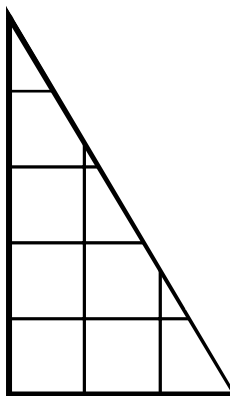
13a) Look at this irregular shape.
Each small square is of side 1 cm.



- i) The **perimeter** of this shape is _____ cm.
- ii) The **area** of the **whole shape** is _____ cm².
- iii) **Shade a rectangle** with an **area of 15 cm²** on the shape above.

b) The triangle below is a **right-angled triangle**.
Each small square is of side 1 cm.

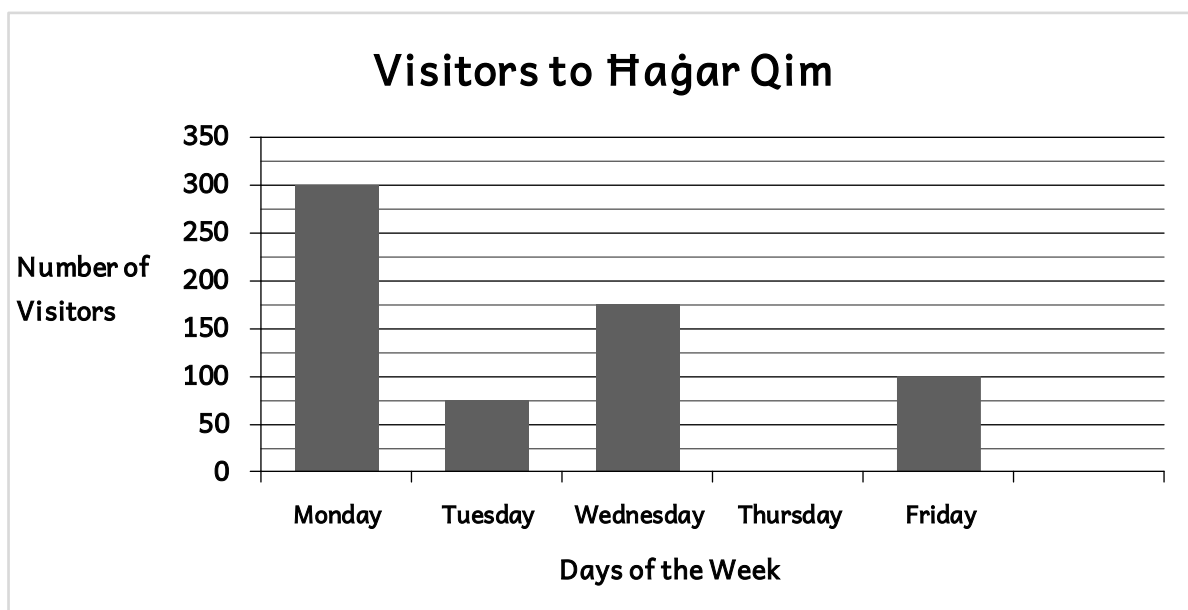
The **area** of the **triangle** is _____ cm².



(6 marks)

14. This graph shows the number of visitors to Hagar Qim during a week in March.

Note: This graph has some missing information.



- a) **850 people** visited the site from Monday to Friday.
- i) There were _____ visitors on **Thursday**.
- ii) **Complete the graph** to show the number of visitors on **Thursday**.
- b) Work out the **mean number of visitors per day** from Monday to Friday.

Show your working here.

visitors

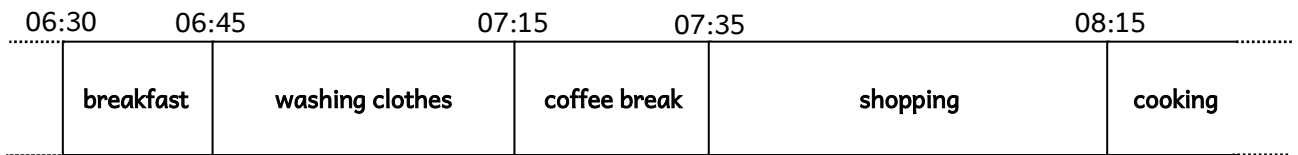
- c) On **Saturday 75 boys** visited Hagar Qim.
 This is $\frac{1}{3}$ of all the children who visited Hagar Qim on Saturday.
 How many children visited Hagar Qim on Saturday?

Show your working here.

children

(6 marks)

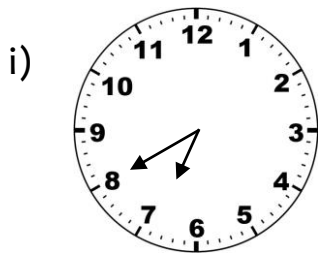
15. The timeline below shows how Gianni spends early Saturday mornings.



a) Fill in.
Gianni spends minutes having breakfast.

b) Gianni spends 45 minutes cooking.
This is equal to $\frac{\text{input}}{\text{input}}$ hour.

c) Write what Gianni is doing at:



ii) quarter to 8

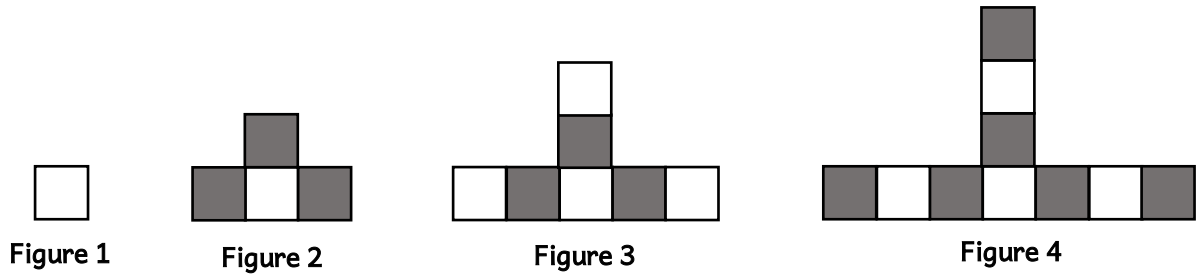
d) From 09:45 to 12:15 Gianni cleans the house.
How many minutes does he spend cleaning the house?

Show your working here.

minutes

(6 marks)

16. Squares are used to make a **pattern**.
Some squares are **black** and some are **white**.



- a) In **Figure 5** there are _____ squares in all.
- b) Draw **Figure 6**.



- c) In **Figure 20** there are:
_____ white squares and _____ black squares.

(6 marks)

END OF PAPER