

**END OF PRIMARY BENCHMARK**

**2019**

**MATHEMATICS**

**WRITTEN PAPER**

**Second Session**

**80 marks**

**1 hour 30 minutes**

1. Work out.

a) $175 + 25 =$ _____  <div style="text-align: center;"><input type="text"/></div>	b) $400 - 149 =$ _____  <div style="text-align: center;"><input type="text"/></div>
c) $24 \times 18 =$ _____  <div style="text-align: center;"><input type="text"/></div>	d) $714 \div 7 =$ _____  <div style="text-align: center;"><input type="text"/></div>

(4 marks)

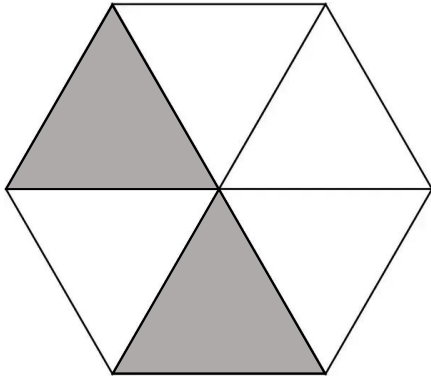
2. Match the calculations which are equal to each other.

- |                           |                  |
|---------------------------|------------------|
| a) $30 \times 30$ ●       | ● $12 \times 2$  |
| b) $\frac{1}{4}$ of 200 ● | ● $9 \times 100$ |
| c) $8 \times 3$ ●         | ● double 25      |
| d) $6 \times 100$ ●       | ● $60 \times 10$ |

(4 marks)

3a) A regular hexagon has \_\_\_\_\_ lines of symmetry.

b) Look at this regular hexagon.



i)  $\frac{\square}{3}$  of the hexagon is shaded.

ii) Tick (✓) the correct answer.

The six triangles that make up the hexagon are:

isosceles triangles

equilateral triangles

scalene triangles

right-angled triangles

(4 marks)

4. Write the **next number** in each sequence.

a) 4, 8, 12, 16, 20,

b) 72, 64, 56, 48, 40,

c) 1, 4, 9, 16, 25,

d) 1, 3, 6, 10, 15,

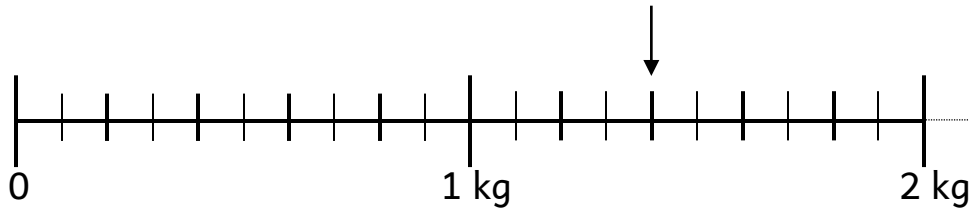
(4 marks)

5. Tick (✓) True or False.

	True	False
a) An <b>equilateral triangle</b> can have a right angle.		
b) An <b>acute angle</b> is smaller than $90^\circ$ .		
c) There are $225^\circ$ in $2\frac{1}{2}$ <b>right angles</b> .		
d) There can be <b>two obtuse angles</b> in a triangle.		

(5 marks)

6a) The diagram below shows the **scale** of a weighing machine.



i) The arrow on the scale shows  grams.

ii) Draw an arrow on the scale to show **0.9 kg**.

b) **1 bag** of apples weighs **1.35 kg**.



i) Work out the **mass** (weight) of **3 bags** of apples.  
Give your answer in **kg**.

Show your working here.

kg

ii) How many such bags of apples have a **total mass** of **8.1 kg**?

Show your working here.

bags

(5 marks)

7. Janet buys a **handbag** and a **skirt** during a **SALE** period.  
The **original price** of the handbag is **€68**.  
The **original price** of the skirt is **€50**.



- a) How much does Janet **spend** in **all**?

Show your working here.

€

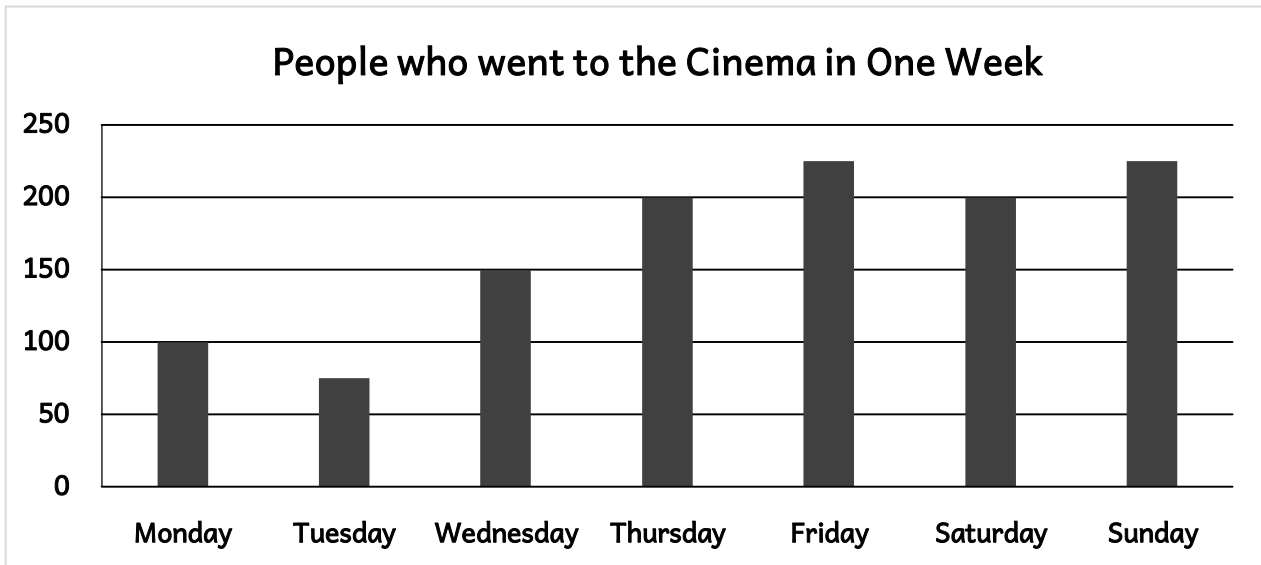
- b) How much money does Janet **save**?

Show your working here.

€

(5 marks)

8. This bar graph shows the number of people who went to the cinema during a particular week.



- a) How many people went to the cinema on Tuesday?

people

- b) The number of people who went to the cinema on \_\_\_\_\_ is double that of \_\_\_\_\_.

- c)  $\frac{2}{5}$  of the people who went to the cinema on **Saturday** were **children**. 30 of these children were **girls**. The rest were boys.

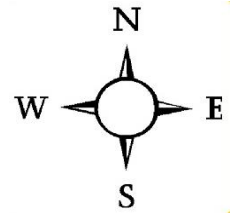
Use your working to show that there were **more boys** than **girls** at the cinema on Saturday.

Show your working here.

(5 marks)

9. Look carefully at this Map of a Town.

fire station		toyshop		grocer		beach
			vet		pool	
dentist	police station					school
airport		bus stop	gym		florist	



a) The **grocer** is \_\_\_\_\_ of the **beach**.

The **beach** is **North East** of the \_\_\_\_\_.

b) Johann and Lara are at the **gym** facing North.

They move **2 squares North**.

They are at the \_\_\_\_\_.

They are still facing North.

Then they turn **135° clockwise** to go to the \_\_\_\_\_.

c) Their father is at the bus stop.

He is facing North.

Then he turns \_\_\_\_\_<sup>o</sup> **anticlockwise** to go to the **police station**.

(5 marks)



10a) Kaya and Liam are decorating gift boxes with different ribbons.  
The rectangles below show **parts of the ribbons** that they have.



← This rectangle represents  $\frac{1}{2}$  of the **silver ribbon**.



← This rectangle represents  $\frac{1}{4}$  of the **black ribbon**.



← This rectangle represents  $\frac{1}{3}$  of the **white ribbon**.

Which is Kaya and Liam's **longest ribbon**?

Tick (✓) the correct answer.

silver ribbon

black ribbon

white ribbon

b) Liam uses **1.5 metres** of the silver ribbon to decorate a gift box.

1.5 metres =  centimetres

c) Kaya needs to buy **14 metres** of gold ribbon for another project.

This ribbon costs **€0.72 per metre**.

How much do **14 metres** of this ribbon cost?

Show your  
working here.

€

(5 marks)

11a) Tick (✓) the smallest capacity.

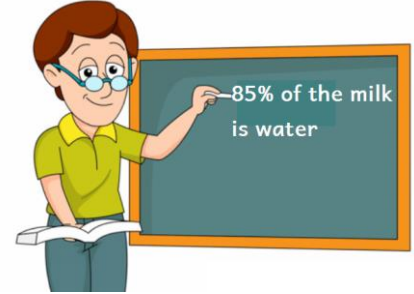
0.3 litres      $\frac{3}{4}$  litres     340 millilitres     3 litres

b) At school, children get a **200 ml** carton of milk every Monday.

i) The teacher explains what milk is made up of.

She says that **85%** of the milk in the carton is **water**.

How many **millilitres of water** are found in **one carton of milk**?



Show your working here.

ml

ii) Last Monday, students drank **18 litres** of milk in **all**.

How many **cartons of milk** were used?

Show your working here.

cartons

(5 marks)

12a) Fill in the missing information about a **rectangle** and a **square**.

i) **Length** = 7 cm

**Area** = 42 cm<sup>2</sup>

**Breadth** =  cm

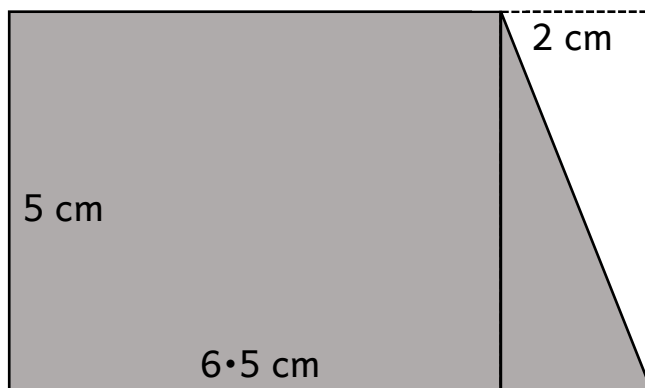
ii) **Area** = 81 cm<sup>2</sup>

**Perimeter** = 36 cm

**Length** =  cm

**Breadth** =  cm

b) Work out the **area** of the **shaded part** in the shape below.



Show your  
working here.

cm<sup>2</sup>

(5 marks)

13. This picture shows dad, mum and their daughter Anna.

- a) Dad is  $1\frac{3}{4}$  m tall.  
Mum is 1.64 m tall.

Mum is  cm shorter than dad.



- b) Look at the picture again.  
Tick (✓) the best estimate for Anna's height.

(i) 0.90 m

(ii)  $1\frac{1}{4}$  m

(iii) 1.6 m

(iv) 125 m

- c) Both Anna and her mum celebrate their birthday on the same day in April.

Mum is 40 years old.

Anna is now  $\frac{1}{4}$  of her mum's age.

How old will Anna be when her mother is 44 years old?

Show your  
working here.

years old

(6 marks)

14. Look carefully at the table below.

FILMS SHOWING TODAY...			
<b>SING</b>		1 hour 54 minutes long	
Starting times	2:30 pm	6:00 pm	8:45 pm
<b>BENJI</b>		1 hour 27 minutes long	
Starting times	2:20 pm	4:45 pm	7:30 pm
<b>TARZAN</b>		1 hour 35 minutes long	
Starting times	1:30 pm	3:30 pm	7:35 pm



a) **SING** is 1 hour 54 minutes long.

1 hour 54 minutes = \_\_\_\_\_ minutes

b) What is the **difference** between the **shortest** and the **longest** film?

minutes
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c) Peter and his sister see the **3<sup>rd</sup>** show of **BENJI**.  
At what time does the film finish?

:
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d) Family Vella wants to see both **BENJI** and **TARZAN**.

They plan to see the **1<sup>st</sup>** show of **BENJI** and the **2<sup>nd</sup>** show of **TARZAN**, both from the start and on the same day.

Is this possible? Tick (✓) the correct answer.

Yes

No

Show working to explain your answer.

Show your working here.

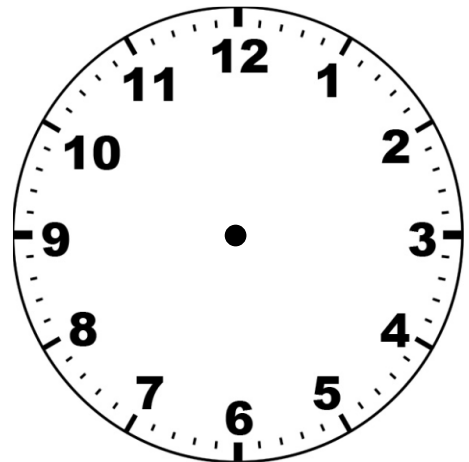
(6 marks)

- 15a) The **mean age** of the **15 children** in a Mini Athletics Club is **6 years**.  
The **mean age** of the same **15 children and the coach** is **8 years**.  
How **old** is the coach?

Show your  
working here.

years old

- b) The Mini Athletics Club sessions start at **15:45**.  
Draw hands on the clock to show **15:45**.

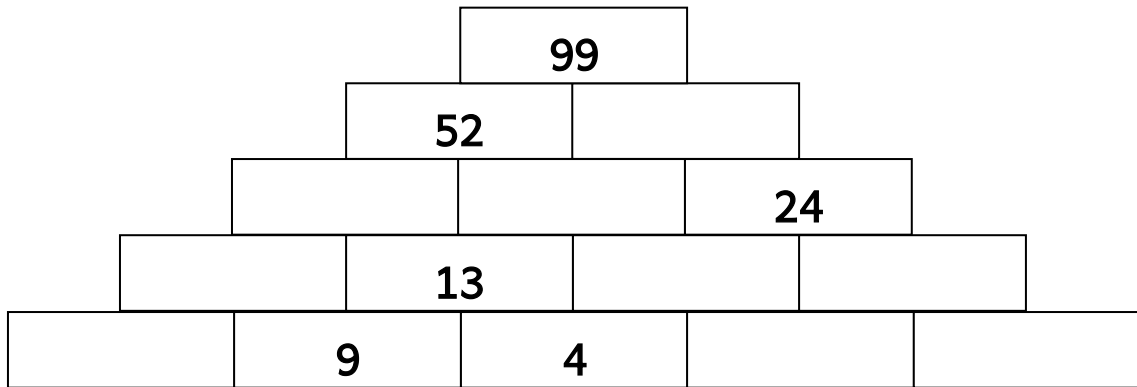


- c) Today is **Wednesday 12<sup>th</sup> June 2019**.  
The children at the Mini Athletics Club have a race on **6<sup>th</sup> July 2019**.  
What **day of the week** is **6<sup>th</sup> July 2019**?

(6 marks)

16a) This is a Number Pyramid.

Each rectangle is the **sum of the two rectangles immediately below**.  
 Fill in the **blank rectangles**.



b) In this Magic Square, the **sum of the numbers of each row, column and diagonal is equal to 15**.

Each number in this Magic Square is **smaller than 10** and is used **only once**.

Fill in the blank squares.

	1	6

(6 marks)

**END OF PAPER**