END OF PRIMARY BENCHMARK

2018

MATHEMATICS

WRITTEN PAPER

80 marks

1 hour 30 minutes

1. **Work out.**

a) 140 + 60 = _____	b) 569 − 247 = _____
c) 40 × 40 = _____	d) 312 ÷ 13 = _____

(4 marks)

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2. I am a **4-digit number**.
Read the clues below to find out what number I am.

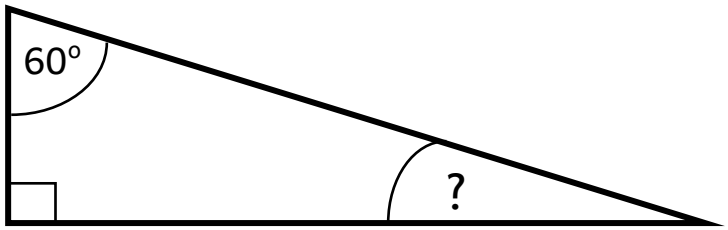
- The digit in the **units** place is the **second multiple of 3**.
- The digit **4 appears once**.
- When **rounded to the nearest 100**, I become **9,400**.
- The digit in the **hundreds** place is **double the digit in the tens** place.

_____ _____ _____ _____

(4 marks)

3a) Look at the triangle below.

The triangle is not drawn to scale.

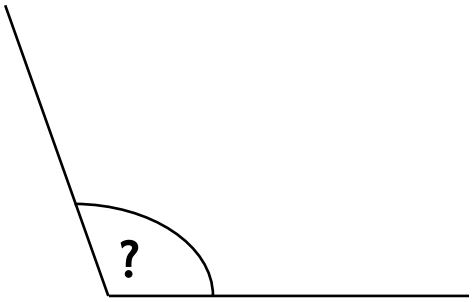


(i) The **sum of all the angles** in any **triangle** is ☐ °.

(ii) **Work out** the **missing angle**. ☐ °

b) **Use a protractor to:**

(i) **measure** the angle below.



☐ °

(ii) **draw** an **angle of 45°**.

(4 marks)

4. Write the missing digits.

a) 3___58 + 342 = 4000

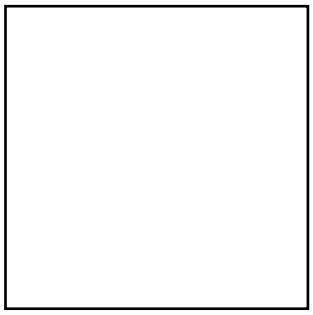
b) 4___3 × 9 = 3627

c) 870___ ÷ 7 = ___244

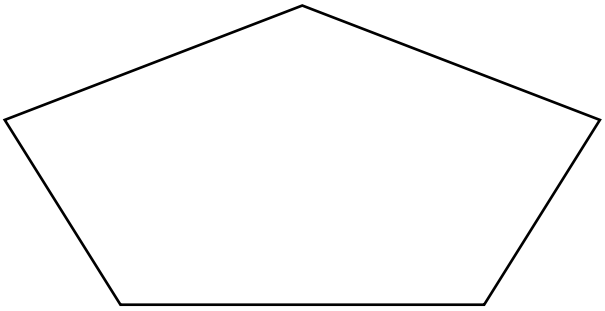
(4 marks)

5a) Draw **all** the **lines of symmetry** of these shapes.
Use a ruler.

(i)



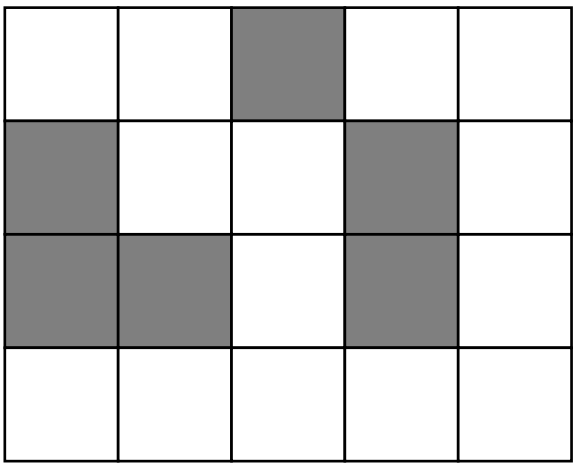
(ii)



b) The figure below is made up of **squares**.

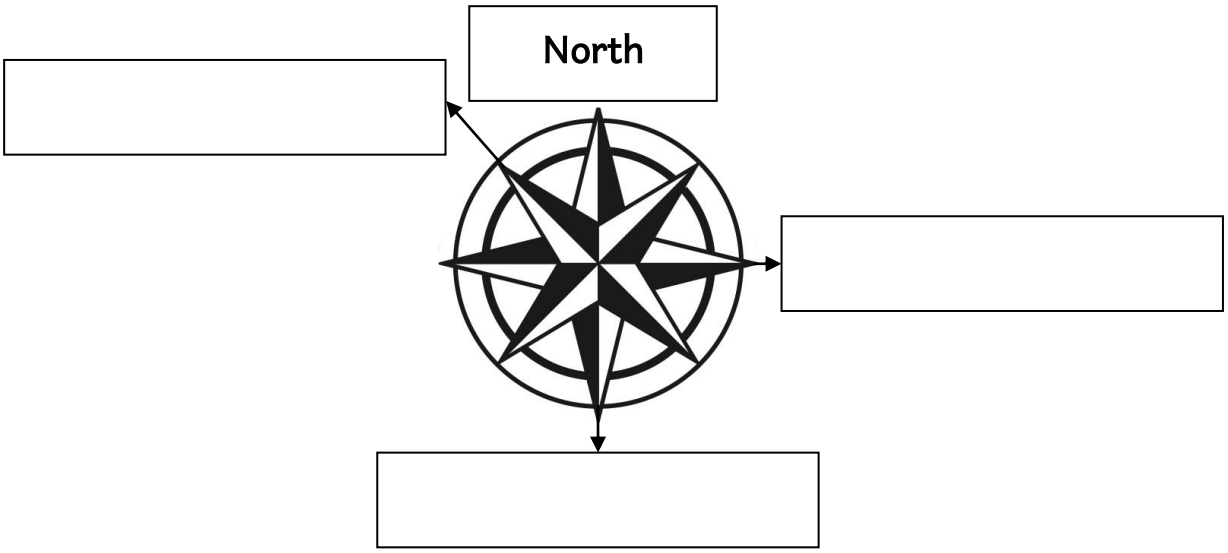
(i) **Shade two more squares** so that the figure has **1 line of symmetry**.

(ii) Then **draw** the **line of symmetry**.

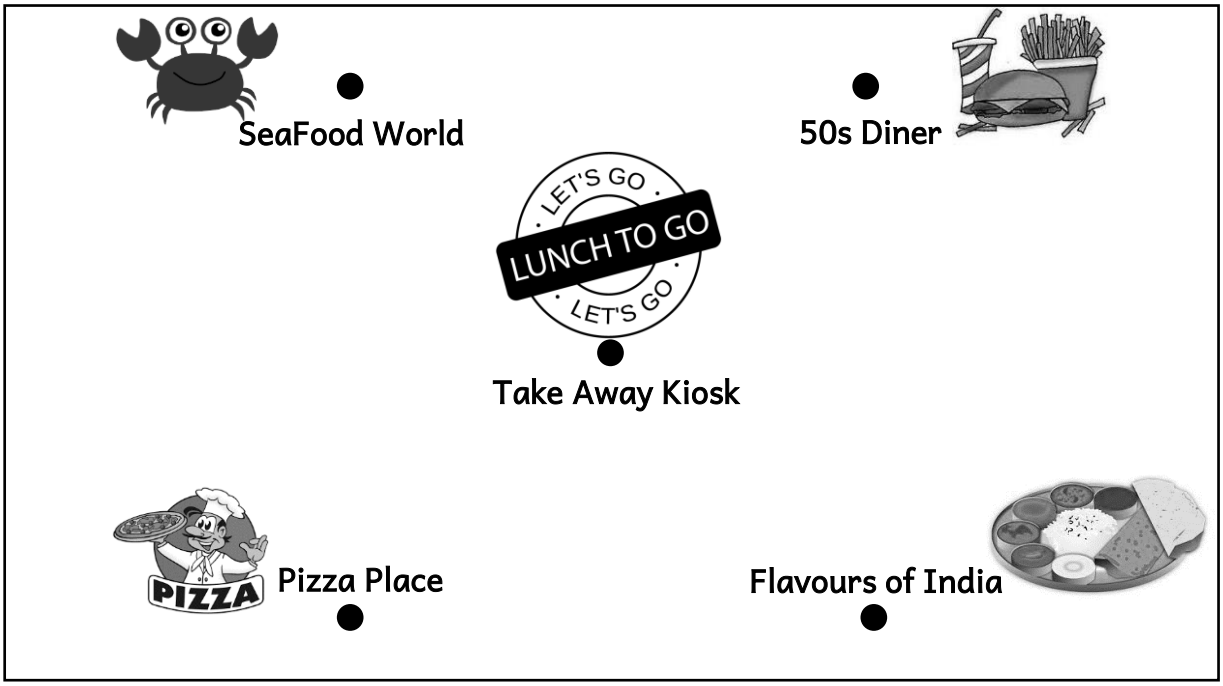


(5 marks)

6*a*) **Fill in the missing compass points in the diagram below.**



b) Below there is the plan of the restaurants' area in a Holiday Resort.



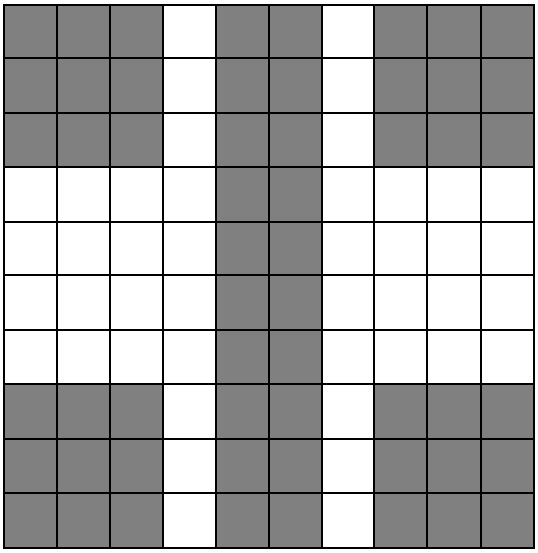
Fill in the blanks with the correct **direction**.

(i) **Pizza Place** is _____ of **Flavours of India**.

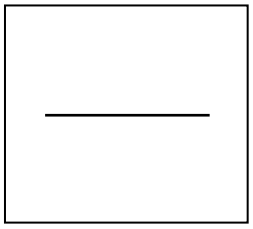
(ii) **Take Away Kiosk** is _____ of **SeaFood World**.

(5 marks)

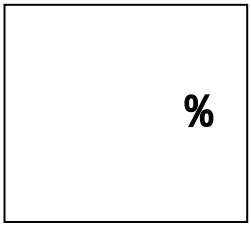
7. Some squares in the grid below are shaded.



a) What **fraction** of the **whole grid** is **shaded**?
Write the fraction in its **simplest form**.



b) What **percentage** of the whole grid is **not shaded**?



c) **Shade more squares** so that $\frac{3}{4}$ **of the grid** is **shaded**.

(5 marks)

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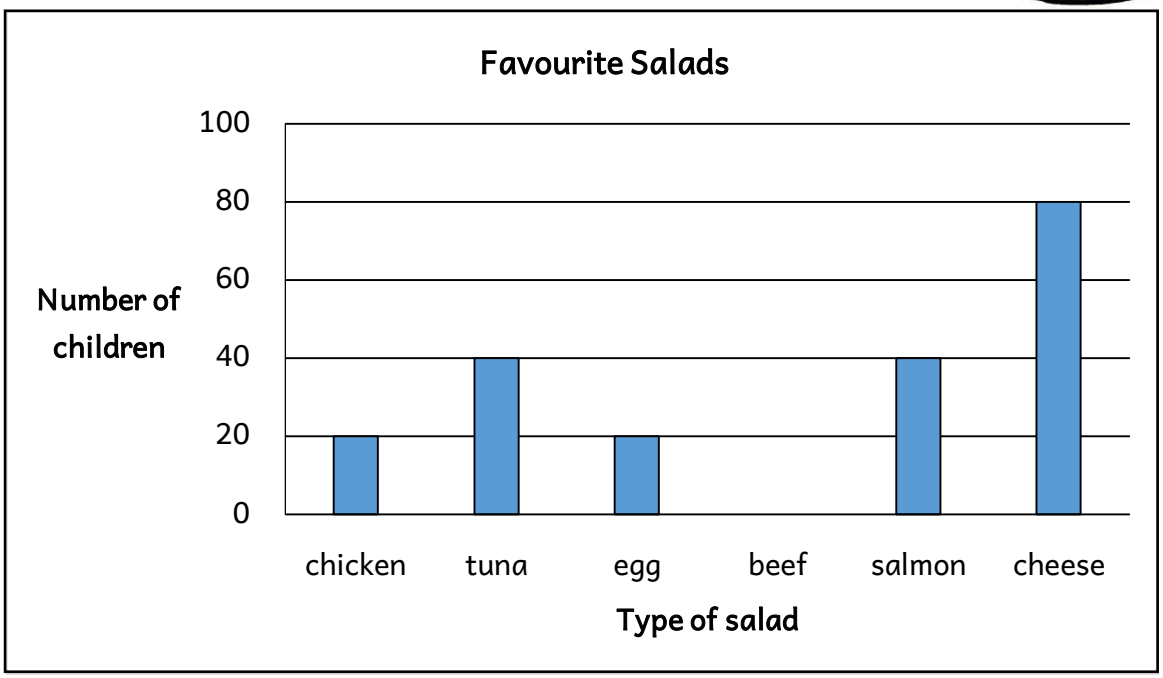
8. Look at the number sequences below.
Fill in the **missing numbers** in these sequences.

a) **1, 3, 6, 10, 15, 21, 28,** ☐, ☐, ☐

b) **16, 25, 36, 49,** ☐, ☐, **100**

(5 marks)

9. The students in Sunshine School took part in a survey about which salads they like best.
The bar graph shows the results.



a) How many students took part in the survey in **all**?

_____ **students**

b) **Express** the number of students who like **tuna salad** **as a fraction** of the **total number of students**.

_____

c) **More than half** of the students **like cheese salad** best.
Is this **true** or **false**? **Tick (✓) the correct answer.**

True ☐ **False** ☐

Explain your answer using working.

Show your working here.

(5 marks)

10. Here is *a* **MAGIC SQUARE**.

The **sum of the numbers of each row**, **column** and **diagonal is equal to 50.**

Fill in the missing numbers.

30	1	12	
		29	2
5	10	3	32
4			9

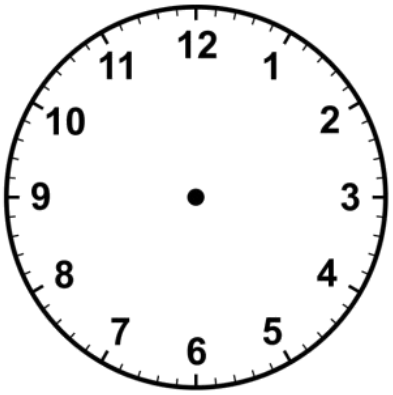
Show your working here.

(5 marks)

11. Some students participate in a race.

a) The race starts at **15:30**.

Draw the hands on the clock face to show **15:30**.



b) These are the timings of **4 students**.

Name of student	Timings
Jack	1 minute 50 seconds
Petra	2 minutes 5 seconds
Amy	1 minute 45 seconds
Manuel	2 minutes 10 seconds

(i) **Tick (✓)** the **name of the fastest** student.

Jack	Petra	Amy	Manuel
☐	☐	☐	☐

(ii) Work out the **difference** between **Jack's** and **Manuel's timings**.

Show your working here.

seconds

(5 marks)

12. The table below shows the number of passengers who travelled from Malta to Gozo between Thursday and Sunday of last week.

Thursday	Friday	Saturday	Sunday
9,034	12,516	11,923	13,459

a) Work out the **total number of passengers** on these days.

Show your working here.

passengers

b) For these 4 days, work out the **mean (average) number of passengers** per day.

Show your working here.

passengers

c) On Monday, there were **fewer passengers** than on the other days.
The **mean from Thursday to Monday** was **10,788 passengers**.
Work out how many **passengers** travelled from Malta to Gozo on **Monday**.

Show your working here.

passengers

(5 marks)

13a) Diane has a fishbowl.

The **capacity** of the fishbowl is **7 litres**.

Diane fills the fishbowl to the top using **500 *ml* bottles of water**.

How many **500 *ml* bottles** are needed to fill the fishbowl?

Tick (✓) the **best estimate**.

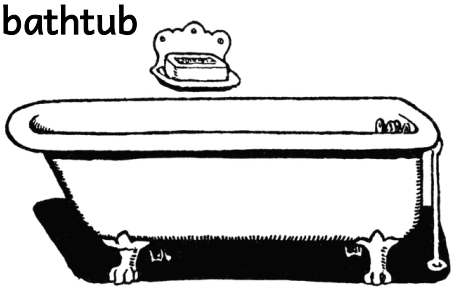
5 bottles	☐	**15 bottles**	☐
50 bottles	☐	**70 bottles**	☐

b) Below there are four items that we find at home.

The unit to measure the capacity is missing.

Write ***l*** or ***ml*** .

(i) **a bathtub**



90 ☐

(ii) **a kettle**

1500 ☐

(iii) **a mug**

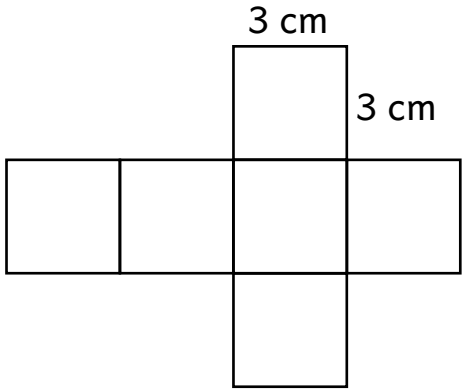
0·25 ☐

(iv) **a spoon**

15 ☐

(6 marks)

14a) Alan uses the net below to make a 3-d shape.
The net is made up of **6 identical squares**.



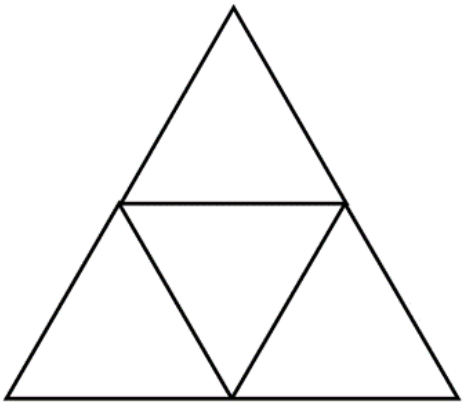
This net is not drawn to scale.

(i) Which **3-d shape** does Alan make?

(ii) What is the **area** of this **net**?

cm²

b) Now, Alan has another net. It is made up of **4 identical triangles**.
Each triangle is an **equilateral triangle** of **side 5 cm**.



This net is not drawn to scale.

(i) What is the **perimeter** of this **net**?

cm

(ii) Which **shape** does this net make?

(6 marks)

15a) Tim has a tin box with **90 marbles** in it.
Its **total mass** is **720 grams**.
The mass of the empty tin box is **450 grams**.
Note: Each marble has the same mass.

(i) Work out the **mass** of **1 marble**.

Show your working here.

grams

(ii) Tim gives some marbles to Gianni.
The **same tin box** now weighs **585 grams**.
How many marbles are there in the tin box now?

Show your working here.

marbles

b) Gianni also has a tin box full of marbles. His box weighs **1·85 kg**.

1·85 kg is **equal to** **grams** .

(6 marks)

16. Elaine and Maya own a restaurant.
They buy some new furniture for their restaurant.

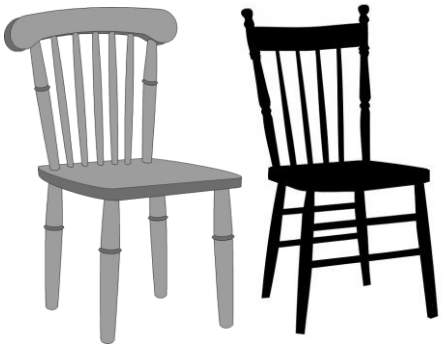
a) Elaine buys **10 shelves** at **€12·95 each**.
How much do these **10 shelves** cost **altogether**?

Show your working here.

€

b) Maya buys **60 chairs** for the restaurant.
Some chairs are **grey** and some are **black**.

Grey chairs cost €20.
Black chairs cost €10.
In **all** Maya spends **€720**.



How many **black chairs** does Maya buy?

Show your working here.

black chairs

(6 marks)

END OF PAPER