

END OF PRIMARY BENCHMARK

2015

SECOND SESSION

MATHEMATICS

WRITTEN PAPER

80 marks

1 hour 30 minutes

1. Work out.

a. $213 + \underline{\hspace{2cm}} = 500$

b. $1000 - 647 = \underline{\hspace{2cm}}$

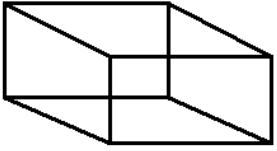
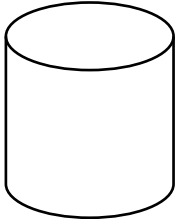
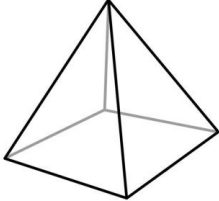
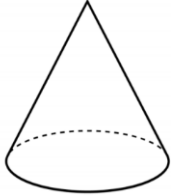
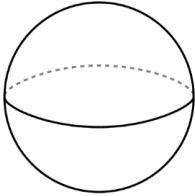
c. $30 \times 30 = \underline{\hspace{2cm}}$

d. $169 \div 13 = \underline{\hspace{2cm}}$

2. Tick (✓) TRUE or FALSE.

	TRUE	FALSE
a. $4 \frac{1}{3}$ is an improper fraction.		
b. $\frac{1}{2}$ is a bigger fraction than $\frac{1}{4}$.		
c. $\frac{5}{15}$ is in its lowest terms.		
d. $\frac{1}{2} = 0.05$		

3. **Match** the properties with the shape.
The first one has been done for you.

	Properties		Shapes
a.	It has no vertices and two edges.		
b.	It has no vertices and no edges.	a	
c.	It has 1 vertex, 1 edge and 2 faces.		
d.	It has 8 vertices, 12 edges and 6 faces.		
e.	It has 5 vertices, 8 edges and 5 faces.		

4a. Four children each write a multiplication.

Gary
3×85

Lara
4×162

Sophie
8×76

Mike
9×48

Who am I? Choose the name of the child whose multiplication matches the following statements.

One is extra.

There is no need to work out the multiplications.

	Who am I?
i) 10×50 is an estimation to my multiplication.	
ii) 16×38 gives the same answer to my multiplication.	
iii) My multiplication gives an odd answer .	

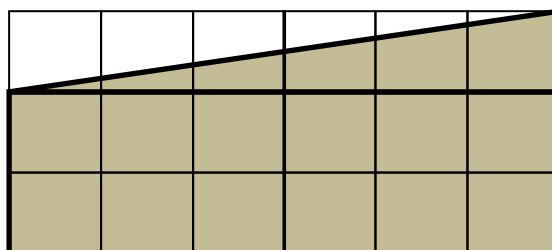
b. When **600** is **divided** by a **mystery number** the **answer** is **40**.

What is the **mystery number**?

$$600 \div \boxed{} = 40$$

5. Look at the diagram carefully.

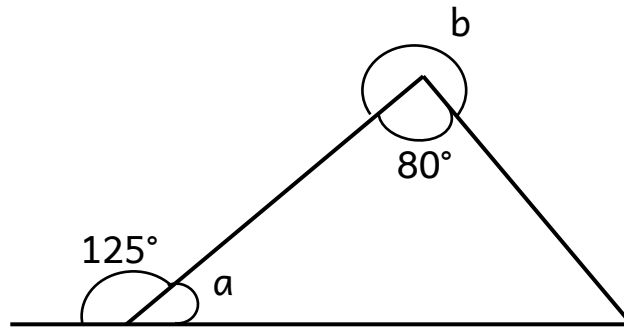
Note: Each square represents 1 cm^2 .



The **area** of the **shaded shape** is

cm^2 .

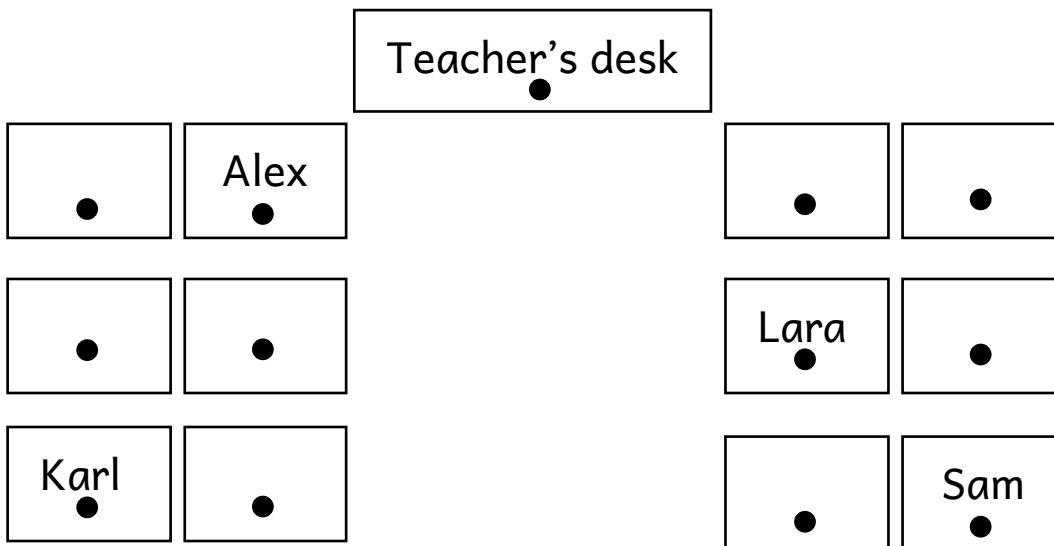
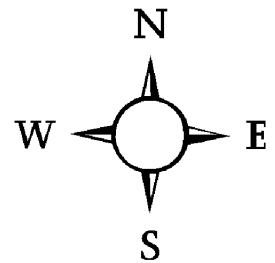
6a. Work out the size of angles a and b .



$a = \underline{\hspace{2cm}}^\circ$

$b = \underline{\hspace{2cm}}^\circ$

b. Below is the seating plan of a classroom.
All the students are facing the teacher's desk.



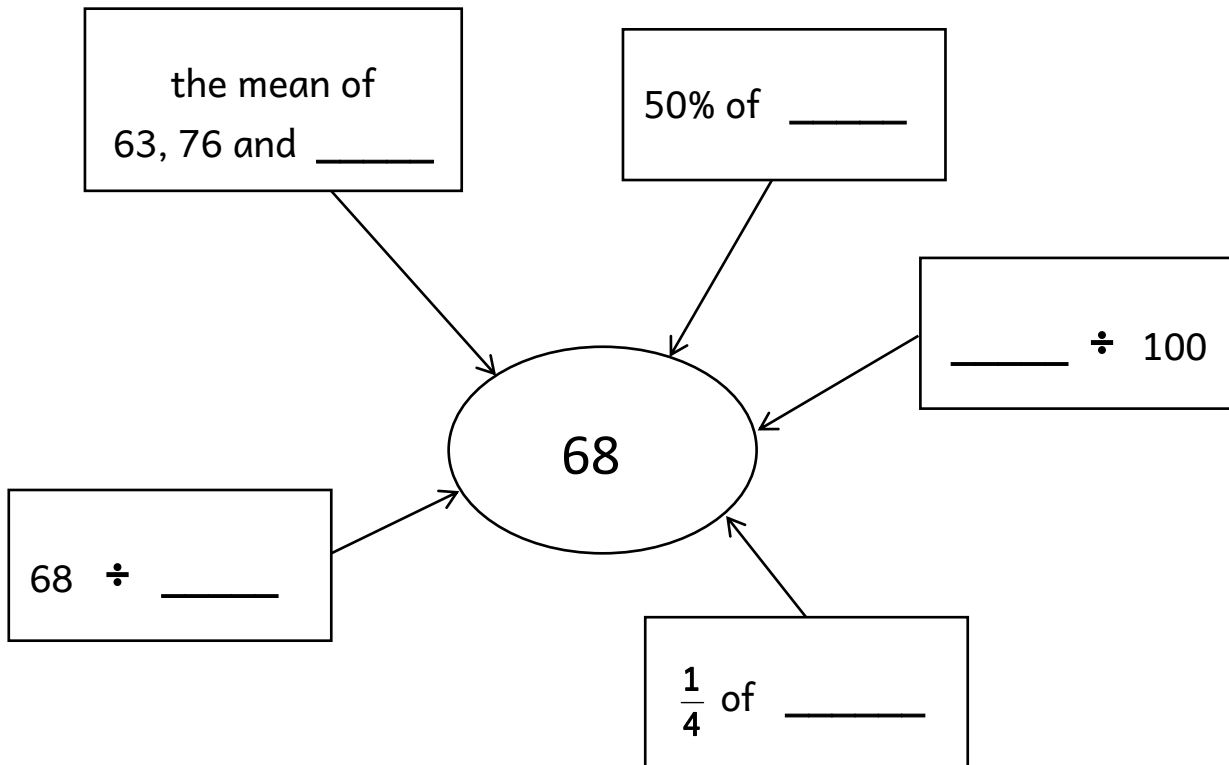
i) Write Ana and Keith's names on the seating plan.

- Ana is 1 seat **North** of Lara.
- Keith is **West** of Lara and **South** of Alex.

ii) Now, Lara looks at Sam.

In which **direction** is Lara facing?

7. Work out the missing numbers so that the answer is always 68.



8a. Alan is preparing for his birthday party.
He has **255 sweets** to put into party bags.
He puts **15 sweets** in each bag.



How many **bags** does he use?

You can show
your working
here.

_____ bags

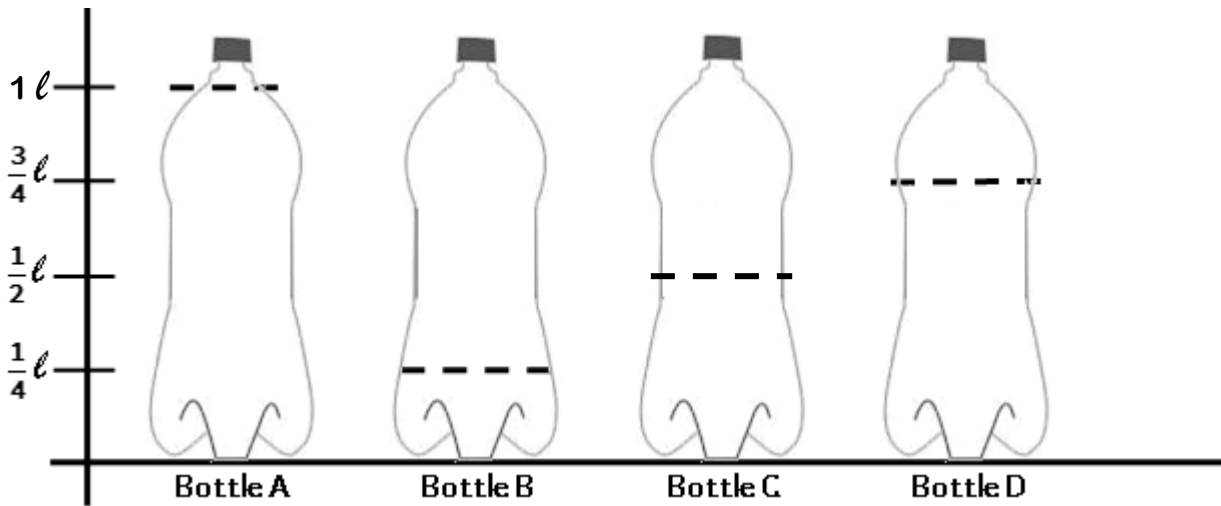
b. Rachel is also preparing for her birthday party.
She puts **18 sweets** in each of her party bags.
She uses **27 bags** and **11 sweets** are left over.

How many **sweets** does she start with?

You can show
your working
here.

_____ sweets

9. These four bottles are filled with different amounts of water.



a. What is the capacity of Bottle D?
Give your answer in **millilitres**.

_____ millilitres

b. Bottle _____ contains **1000 ml** of water.

c. Bottle D holds _____ **ml** more than **Bottle B**.

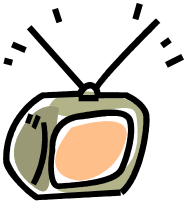
d. Bottle _____ holds **twice as much** as **Bottle C**.

e. What is the **total amount of water** in these four bottles?
Give your answer in **litres**.

You can show your working here.

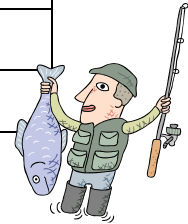
_____ litres

10. Some of the T.V. programmes shown on the **Investigation Channel** are shown below.

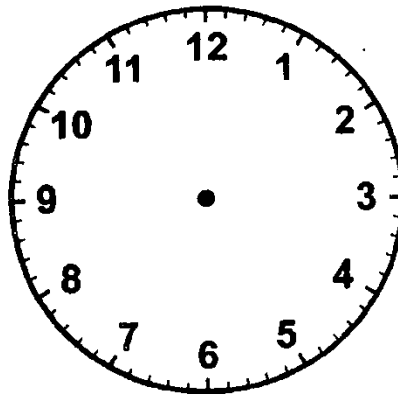


Investigation Channel T.V. programmes

10:05	Ultimate Survival
10:35	Speed Machines
11:55	Future Weapon
12:50	Oil Rig
13:15	Fishing with Me



- a. On the clock below, draw the **starting time** of the programme **Oil Rig**.



- b. **Fishing with Me** is half an hour long.
At what time does it finish?

_____ : _____

- c. How long is **Future Weapon**?
Give your answer in **minutes**.

_____ minutes

- d. The **longest programme** is _____ .

11. Lara and Maria go shopping for clothes.
 Lara gets €1.30 change from €50.
 Maria gets €4.25 change from €70.

a. How much more than Lara does Maria spend?

You can show your working here.

€ ____ . ____

- b. Lara buys 2 t-shirts and a jacket.
 The 2 t-shirts have the same price.
 The jacket costs €27.98.
 Work out the cost of one t-shirt.



You can show your working here.

€ ____ . ____

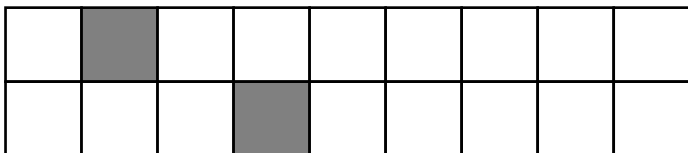
- c. Maria buys a skirt and a coat.
 The skirt costs €12.50.
 Work out the cost of the coat.



You can show your working here.

€ ____ . ____

12a. Look at the diagram below.

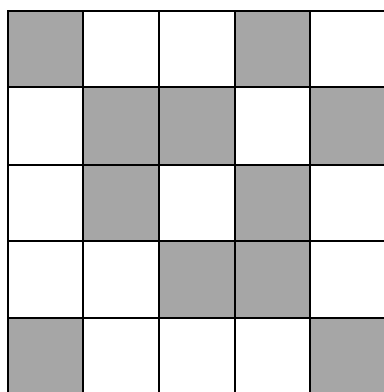


What fraction is **shaded**?

Give your answer in its **simplest form**.

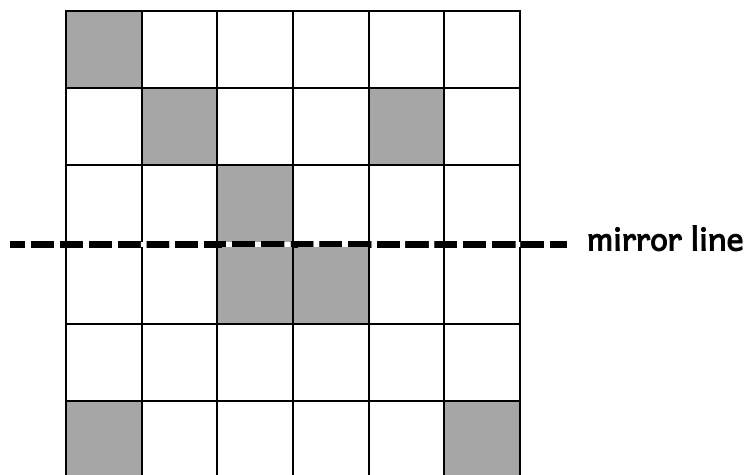
$$\frac{\square}{\square}$$

b. Draw the **line of symmetry**.



c. Look at the diagram below.

Shade the squares needed to complete the reflection in the mirror line.



13. Ten lamp posts are placed at equal lengths on a road.



The distance between the 2nd and the 6th lamp post is 36 m.

a. Work out the **distance** between each lamp post.

You can show
your working
here.

_____ metres

b. What is the **distance** between the 1st and the 10th lamp post?

You can show
your working
here.

_____ metres

c. How many **lamp posts** are needed to cover a **distance** of 108 m?

You can show
your working
here.

_____ lamp posts

14. Ben looks at cars going past his school.
 He sees **90 cars**.
 He writes the results in the table below.

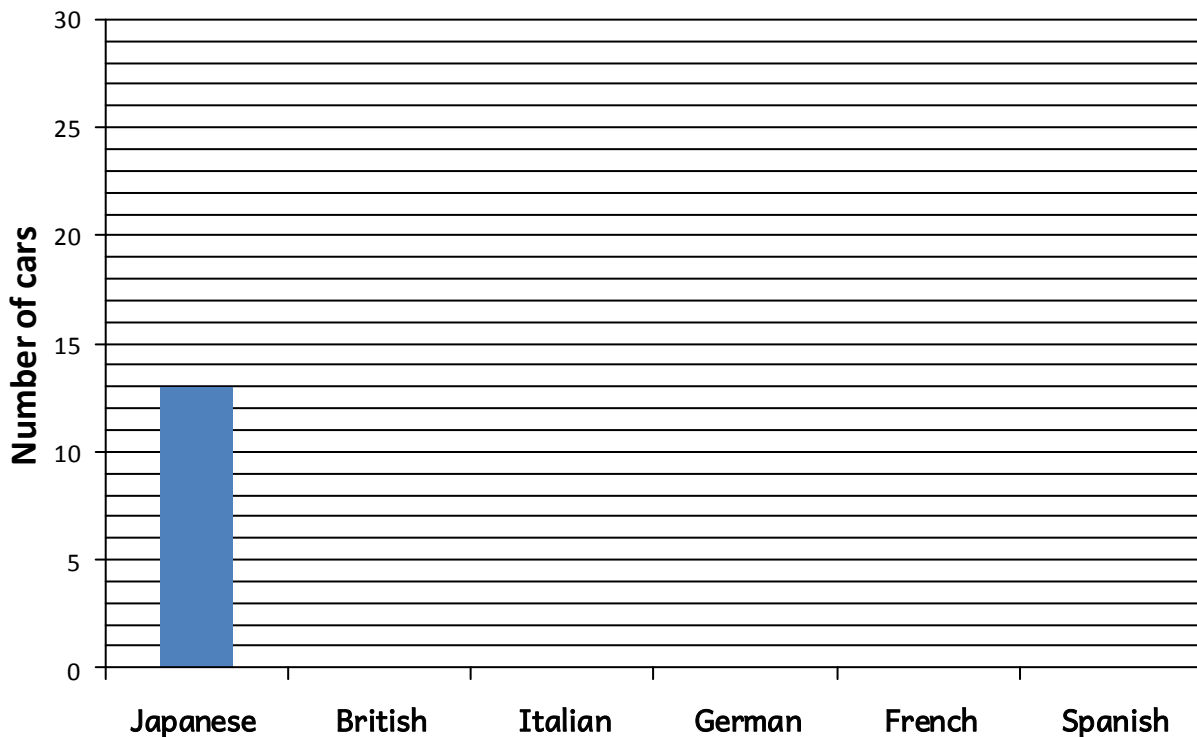
Type of car	Number of cars
Japanese	13
British	12 more than Japanese cars
Italian	0
German	double the number of Japanese cars
French	10 less than British cars
Spanish	the rest

- a. How many cars are **Spanish**?

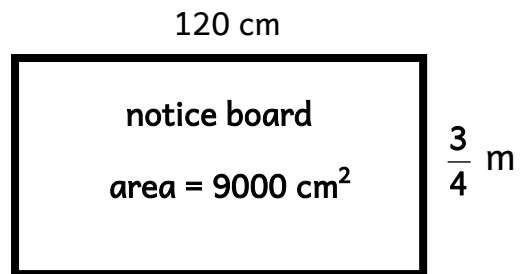
You can show your working here.

_____ cars

- b. Complete the bar chart.



15. This is a notice board in a school.



a. What is the **perimeter** of the notice board in **cm**?

You can show your working here.

_____ cm

b. There is only **one poster** on the notice board.

i) What is the **area of the poster** in **cm²**?

You can show your working here.

50 cm

65 cm

poster

30 cm

45 cm

_____ cm^2

ii) What **area** (in **cm²**) is **left uncovered** on the notice board?

You can show your working here.

_____ cm^2

16. Each shape below stands for a number.

The numbers in the boxes on the right are the totals of the numbers in each row.

The numbers at the bottom are the totals of the numbers in each column.

a. Work out the value of each shape.

b. Work out the value of the remaining totals.

□	★	□	○	□
○	◆	○	★	30
□	◆	★	◆	□
★	★	★	★	32
55	40	□	□	

= _____

 = _____

 = _____

 = _____

END OF PAPER

Marks Scheme

Mental Paper	Nos.	1 - 20	20 × 1 mark	=	20 marks
Written Paper	Nos.	1 - 4	4 × 4 marks	=	16 marks
		5 - 12	8 × 5 marks	=	40 marks
		13 - 16	4 × 6 marks	=	24 marks
		TOTAL			=