



ST NICHOLAS COLLEGE
RABAT MIDDLE SCHOOL
HALF YEARLY EXAMINATIONS
February 2016

Level
5-7

Form 2

MATHEMATICS

TIME: 1hr 30mins

Main Paper

Question	1	2	3	4	5	6	7	8	9	10	11	12	Main	NC	Global Mark
Mark															

DO NOT WRITE ABOVE THIS LINE

NAME: _____ CLASS: _____

INSTRUCTIONS TO CANDIDATES:

Read all the questions carefully before you start answering.

- Answer all questions.
- This paper carries 75 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.

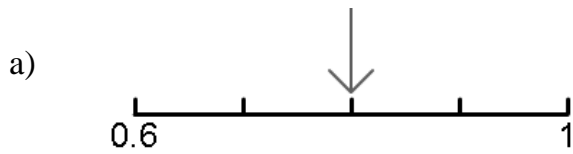
1. **Match.** One is done for you.

$\frac{3}{10}$	0.5	25%	$\frac{3}{4}$	100%	0.1
0.25	$\frac{1}{10}$	1	50%	0.75	30%

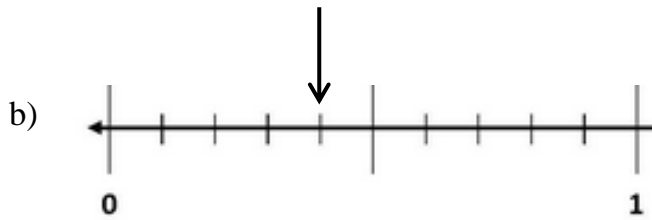
A line connects the box containing '0.5' in the top row to the box containing '50%' in the bottom row.

(5 marks)

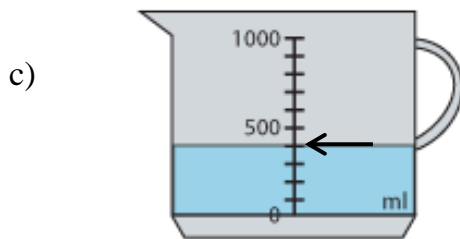
2. At what value is the arrow pointing?



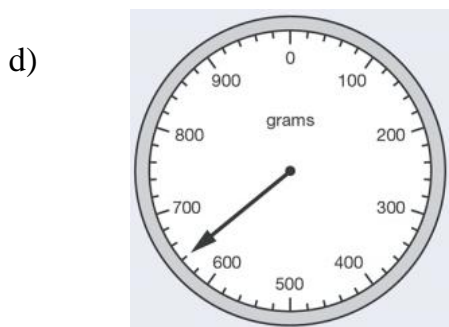
Ans: _____



Ans: _____



Ans: _____ ml



Ans: _____ g

(4 marks)

3. Complete the following table of temperature changes. The first one is done for you.

Original Temperature	Temperature change	Final Temperature	Working (if needed)
-2 °C	+11 °C	9 °C	-2 + 11 = 9
6 °C	-10 °C		
	-3 °C	8 °C	
-5 °C		-2 °C	

(5 marks)

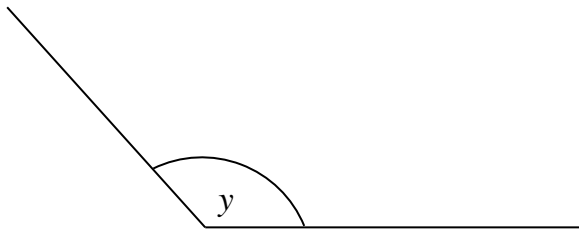
4. **Work out** the value of $7t + s$ when $t = 2$ and $s = 10$.

Ans: _____

(3 marks)

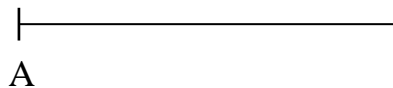
5. Use a protractor to:

a) measure angle y .



Angle $y =$ _____ $^{\circ}$

b) draw and mark an angle of 68° at point A.



(3 marks)

6. Write **True** or **False**.

a) 1 is a prime number.

b) $2^3 = 6$.

c) 7 is a factor of 28.

d) 38 is a multiple of 9.

e) $5^2 = 25$.

f) 17, 23 and 81 are even numbers.

g) 36574 rounded to the nearest hundred is 36600.

(7 marks)

7. Fill in:

a) $17 \rightarrow +9 \rightarrow \square$

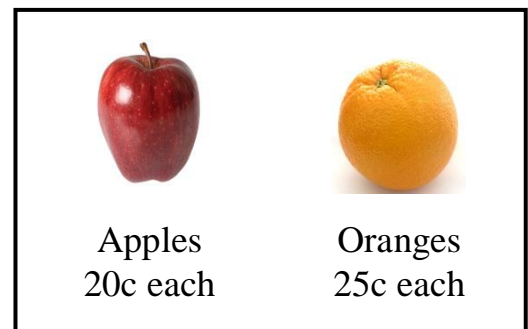
b) $8 \rightarrow \square \rightarrow 48$

c) $\square \rightarrow \div 5 \rightarrow 7$

(5 marks)

8. An apple costs 20c and an orange costs 25c.

a) Work out the cost of 2 apples and 3 oranges.



Ans: _____

b) Jane buys 6 apples and some oranges. She pays €1.70. How many oranges does Jane buy?

Ans: _____ oranges

c) Fill in the formula using x for the number of apples and y for the number of oranges.

$$\text{Cost (in cents)} = 20 \times \square + 25 \times \square$$

(7 marks)

9. Karl has €30 pocket money every month.

a) Karl spends $\frac{3}{10}$ of his pocket money on transport. How much does he spend on transport?

Ans: € _____

b) Karl spends $\frac{1}{5}$ of his pocket money on comic books and €5 on sweets. He saves the rest of his pocket money. How much money does Karl save?

Ans: € _____

(7 marks)

10. a) Here are the weights, in kg, of **12 children**.

40.2	41.4	45.1	45.1	48.5	50.3
42.3	42.7	44.4	46.2	46.3	46.6

i) Find the **range** of the children's weight.

Ans: _____ kg

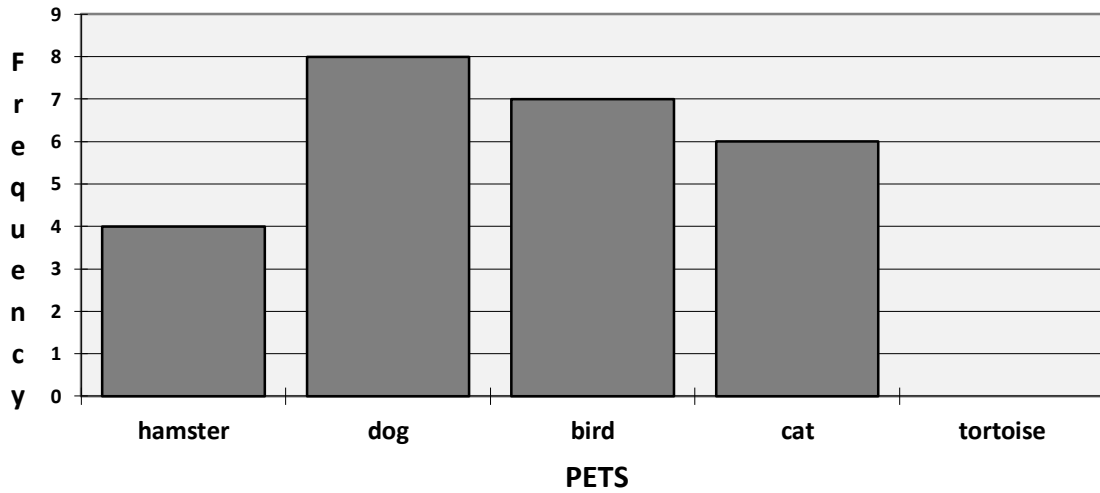
ii) Find their **median** weight.

Ans: _____ kg

iii) Find their **mean** weight, giving your answer to 1 d.p.

Ans: _____ kg

10. b) The bar chart below shows the number of pets owned by the children.



i) **Two children** own a tortoise. Complete the bar chart by drawing the missing bar.

ii) Which is the most common pet?

Ans: _____

iii) How many **more** birds than hamsters are there?

Ans: _____ more

iv) How many pets **altogether**?

Ans: _____ pets

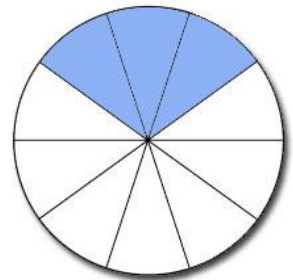
(15 marks)

11. a) i) What **fraction** is **shaded**?

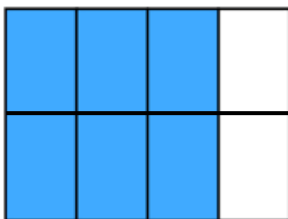
Ans: _____

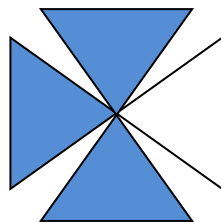
ii) Write your answer to (i) as a **percentage**.

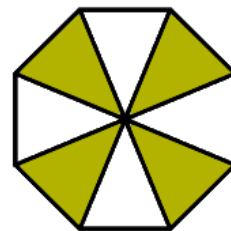
Ans: _____%



b) One of the diagrams below is $\frac{3}{4}$ **shaded**. Which is it?







(5 marks)

