

KULLEGĠ SAN BENEDITTU
Boys Secondary School, Kirkop

Levels
6-7

HALF-YEARLY EXAMINATIONS – FEBRUARY 2012

FORM 1

MATHEMATICS

TIME: 30 mins

Non Calculator Paper

Question	1	2	3	4	5	6	7	8	9	Total
Max. Mark	1	1	2	2	5	5	2	2	5	25
Mark										

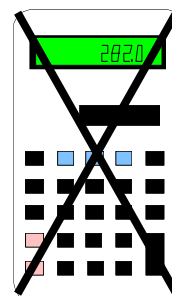
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NAME AND SURNAME: _____ **CLASS:** _____

INSTRUCTIONS TO CANDIDATES:

Read all the questions carefully before you start answering.

- Answer all questions.
- This paper carries 25 marks.
- **Calculators, protractors** and other mathematical instruments are **NOT ALLOWED**.
- On your desk you should have nothing except for **pen, pencil** and the **examination paper**.



1. Write **two thousand four hundred and eleven** in figures.

_____ (1 mark)

2. What is the **value** of the **figure 4** in the number below?

2.43 → _____

(1 mark)

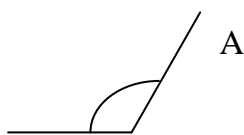
3. Work out:

(a)
$$\begin{array}{r} 28.48 \\ + 4.27 \\ \hline \end{array}$$

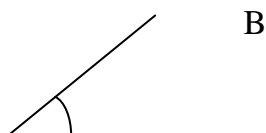
(b)
$$\begin{array}{r} 14.94 \\ - 6.45 \\ \hline \end{array}$$

(2 marks)

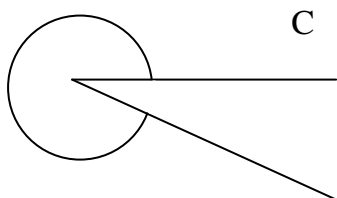
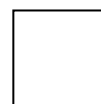
4. Match the following angles. The first one is done for you as an example.



Right angle



Reflex angle



Obtuse angle



Acute angle



(2 marks)

5. Place the following **four** numbers in order of size, the **smallest** first.

$$423 \times 1000$$

$$72000$$

$$10^3$$

1 million

Ans: _____

(5 marks)

6. (a) Circle all the **square numbers** in the table below.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

- (b) Anita thinks of an **even square number** between 1 and 40.

What can her number be?

Ans: _____ or _____ or _____

- (c) Which of the following is a **prime number**?

12 15 23 28 33 39

Ans: _____

(5 marks)

7. Simplify these fractions

(a) $\frac{8}{20} =$

Ans: _____

(b) $\frac{40}{320} =$

Ans: _____
(2 marks)

8. (a) Change $\frac{345}{1000}$ to a **decimal** number.

Ans: _____

(b) Orange juice is made up of 90% concentrated juice and the rest of water.
What is the percentage of water?

Ans: _____%
(2 mark)

9. Fill in the blank spaces with the appropriate LOGO commands to draw the given shape.

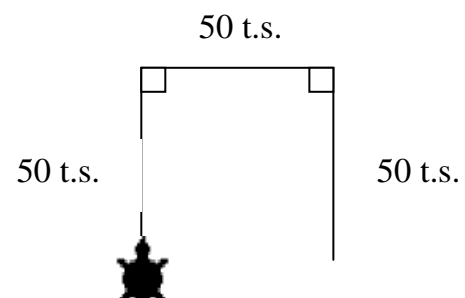
PD

FD _____

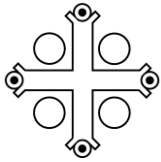
_____ **90**

FD 50

RT _____



(5 marks)



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HALF-YEARLY EXAMINATIONS – FEBRUARY 2012

FORM 1

MATHEMATICS

TIME: 1hr 30mins

Main Paper

Question	1	2	3	4	5	6	7	8	9	10	11	Main	NC	Global Mark
Max. Mark	3	11	2	3	9	10	7	7	8	7	8	75	25	100
Mark														

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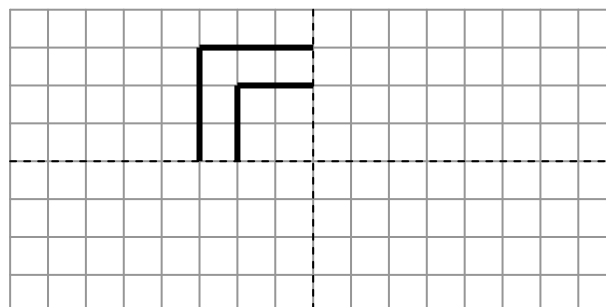
NAME AND SURNAME: _____ **CLASS:** _____

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. **Complete** the shape so that the broken lines are the lines of symmetry.



(3 marks)

2. a) Share €11 among 3 children giving your answer to **2 decimal places**.

Ans_____

- b) Calculate

i) $\frac{1}{5}$ of 28.25kg

Ans_____

ii) $\frac{3}{8}$ of €300

Ans_____

- c) Work out. Give your answer in its lowest terms.

i) $\frac{1}{9} + \frac{5}{9}$

Ans_____

ii) $\frac{2}{3} \times \frac{9}{10}$

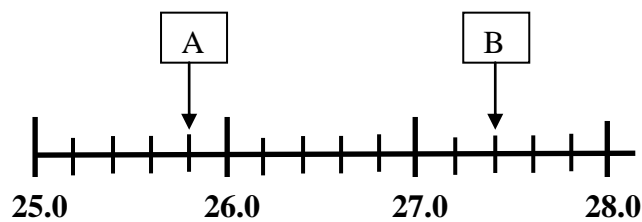
Ans_____

iii) Write the value of $\sqrt{625}$

Ans_____

(11 marks)

3. What are the **values of A and B** on the number line below?



A = _____ B = _____

(2 marks)

4. John bought 60 rulers, 90 pencils and 120 rubbers
- a. Write down the ratio of **rulers : pencils : rubbers**.

_____ : _____ : _____

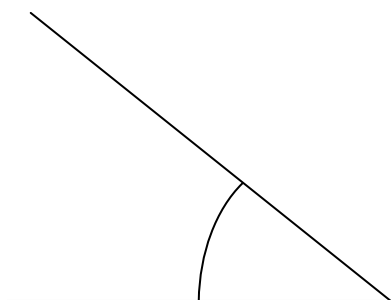
- b. Simplify your ratio.

_____ : _____ : _____

(3 Marks)

5. a) Use a **protractor** to measure the following angle.

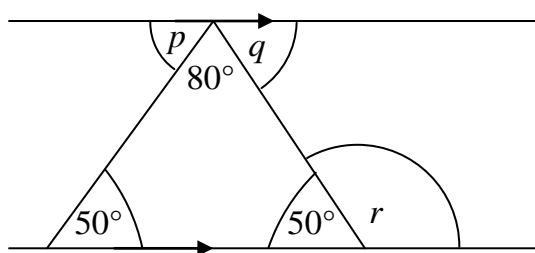
- b) Draw and label an angle of 95°



- c) Work out the size of the marked angles.

Give reasons for your answers, choosing from list below.

[angles on a straight line, angles at a point, corresponding angles, alternate angles, vertically opposite angles, angles of a triangle]



$p =$ _____ Reason: _____

$q =$ _____ Reason: _____

$r =$ _____ Reason: _____

(9 marks)

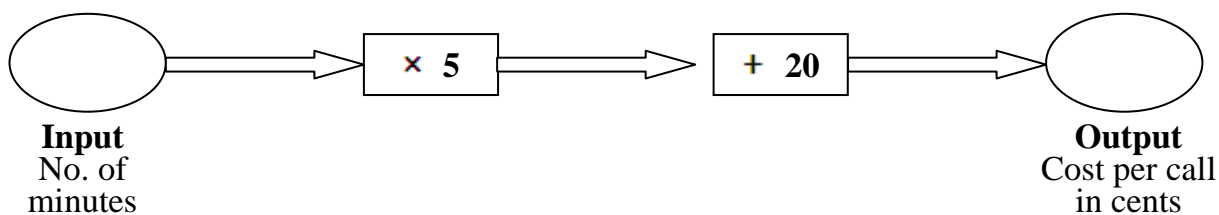
6. From the following list of numbers, write down

5	12	27	11	38	49	20	60
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- a) Two **prime** numbers _____
- b) A **square** number _____
- c) A **common multiple** of 3 and 4 _____
- d) Two **multiples** of 6 _____
- e) Four **factors** of 60 _____

(10 marks)

7. Magic Mobile uses this number machine to calculate the cost per call:



a)

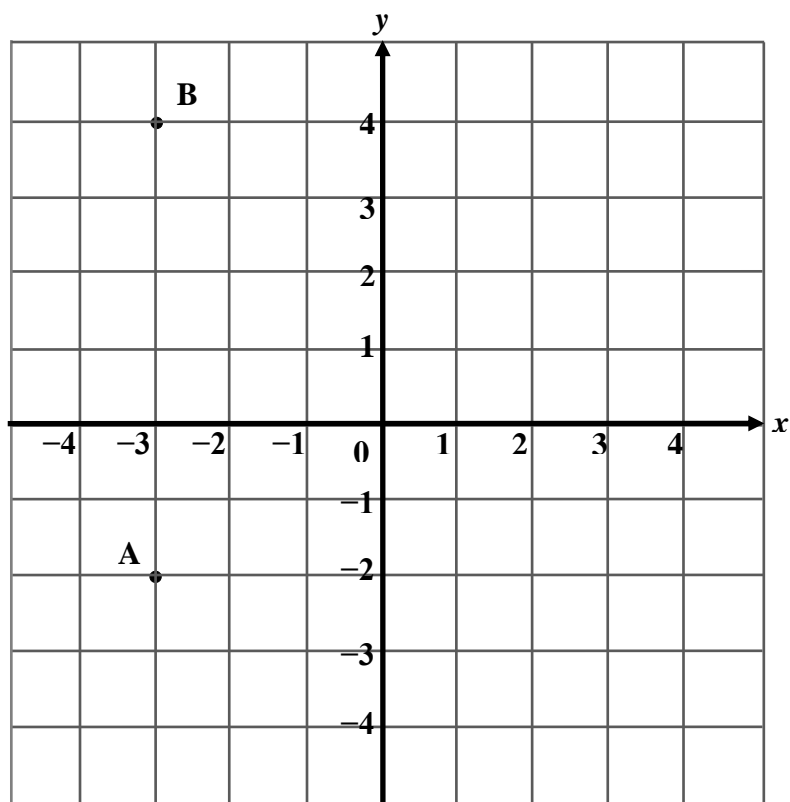
Input No. of minutes (N)	Output Cost (C)
1	25
2	
3	35
4	
10	
	80

b) Write down the rule for finding the cost C from the number of minutes N .

$$C = \underline{\hspace{5cm}}$$

(7 marks)

8. Use this grid to answer the following questions.



- a) Write down the coordinates of A and B

A _____ B _____

- b) **Plot** and **label** these points

i. C (3, 4)

ii. D (3, -2)

- c) Join A to B, B to C and C to D

What shape have you drawn? _____

(7 marks)

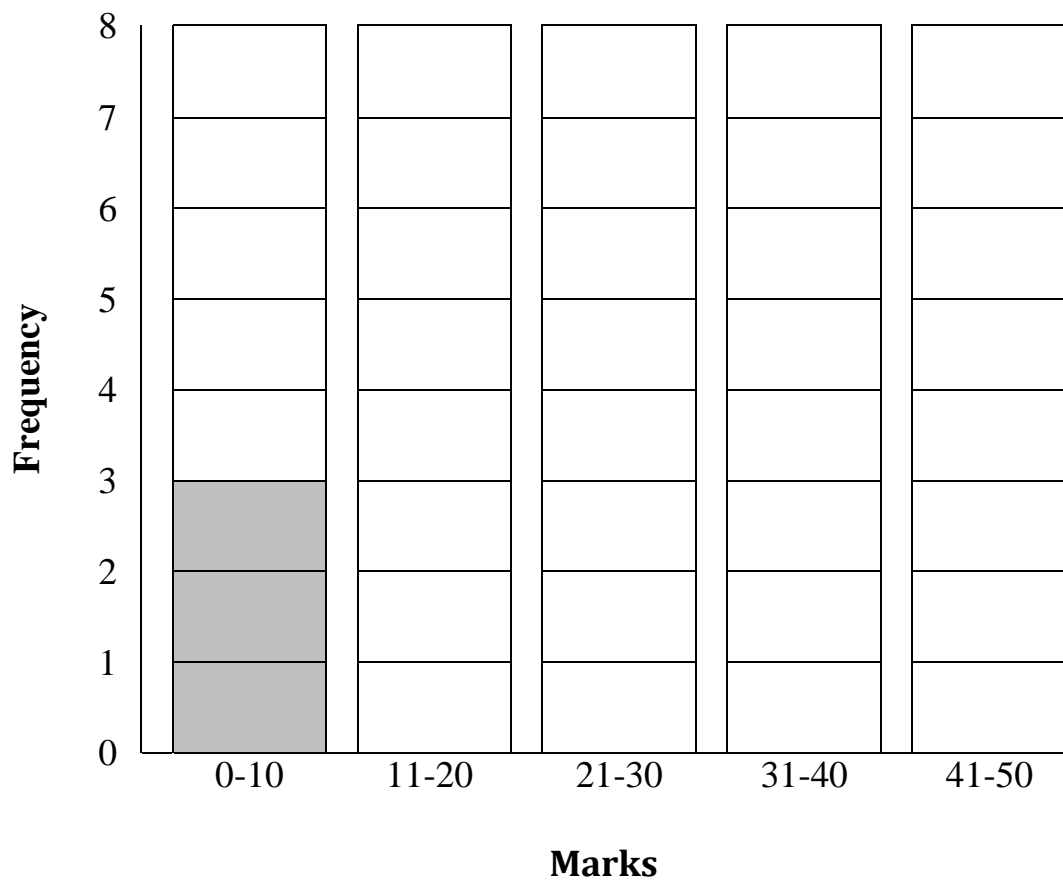
9. Ms Borg gave a History test to her class. These are the results of the students in her class. The test was out of 50 Marks.

22 36 38 32 7 33 19 41 46 27 25 37 23
46 13 20 12 26 30 37 8 10 41 29 20

- a. Complete the following **frequency table**:

Mark	Tally	Frequency
0-10		3
11-20		
21-30		
31-40		6
41-50		
	Total	25

- b. Complete the **Bar Chart** to represent this information table:



- c. The pass mark for this test was **31**.
- i. Write the number of students who **passed** the test as a **fraction** of the **whole** class.

Ans_____

- ii. **Simplify** your answer.

Ans_____

(8 marks)

10. **Ten** students go to a football game. Their ages are as follows:

12 7 9 11 9 10 9 8 8 9

- a) What is the **mean** of their ages?

Ans_____

- b) What is the **mode** of their ages?

Ans_____

- c) What is the **median** of their ages?

Ans_____

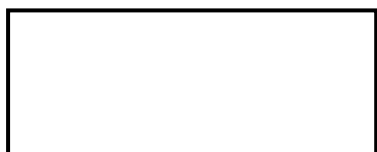
- d) What is the **range** of their ages?

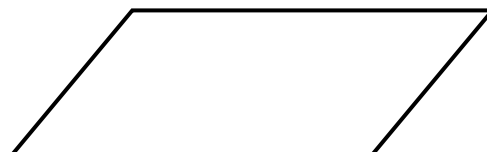
Ans_____

(7 marks)

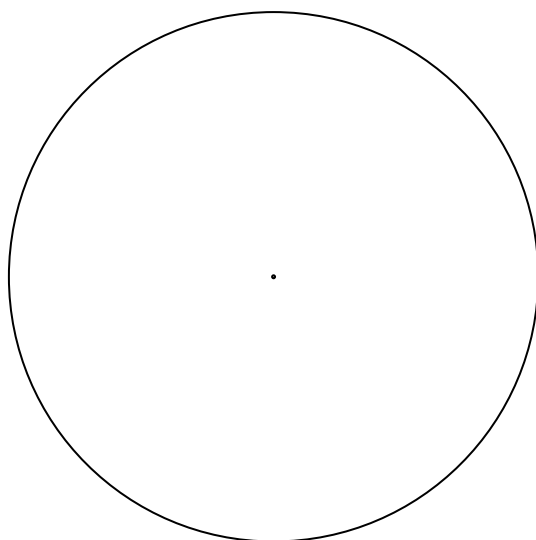
11. a) Choose the correct name of the following **shapes** :

square	parallelogram	rectangle	trapezium
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b) i. Measure the **radius** of circle centre O.



_____ cm

ii. Draw a diameter .

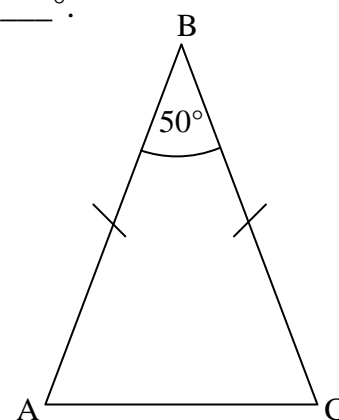
c) i) Underline the correct word :

$\triangle ABC$ below is (an isosceles, an equilateral, a scalene) triangle.

ii) Fill in the blanks: Angles in a triangle add up to _____ $^{\circ}$.

iii) **Calculate** $\angle A$.

Ans _____ $^{\circ}$



(8 marks)