

KULLEGĠ SAN BENEDITTU
Boys Secondary School, Kirkop

Levels
7-8

HALF-YEARLY EXAMINATIONS – FEBRUARY 2013

FORM 1

MATHEMATICS Levels 7-8

TIME: 30mins

Non Calculator Paper

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

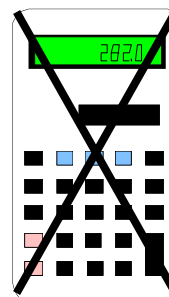
DO NOT WRITE ABOVE THIS LINE

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

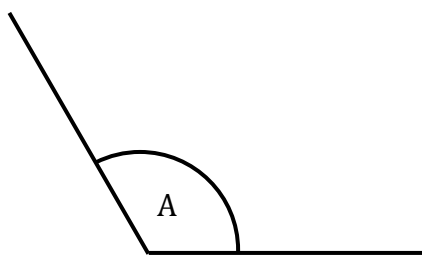
INSTRUCTIONS TO CANDIDATES:

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, ruler** and the **examination paper**.



1. Underline the correct answers:



a. Angle A is about: 90° 120° 45° 170°

b. Angle A is called: Acute Obtuse Right Reflex

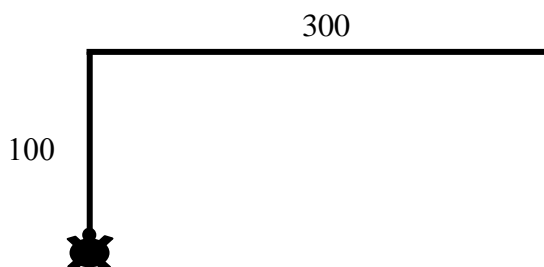
(2 marks)

2. a. Write 5,361,002 in words.

b. Write *four hundred fifty thousand, one hundred twenty two* in figures.

(2 marks)

3. Fill in the missing LOGO commands to draw the shape below.
The numbers represent the amount of steps moved by the turtle.



PD
FD _____ RT 90 FD _____

(2 marks)

4. a. Write 1,000,000,000 as a power of 10. Ans: _____

b. Which is greater: 1,000,000,000 or 10 billion? Ans: _____

(2 marks)

5. a. Round 41.4752 to 2 decimal places Ans: _____

b. i) Round the following numbers to the nearest 10:

323 = _____

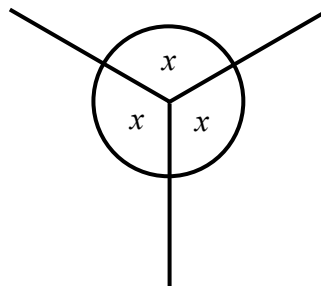
19 = _____

ii) Use your answers to estimate 323×19 .

Ans: _____

(6 marks)

6. Calculate the value of angle x . Give a reason for your answer.



$x =$ _____[°]

Reason: _____

(3 marks)

7. The marks of some students in a maths test are:

82, 85, 90, 87, 95, 60, 52, 81, 82, 91.

a) Find the **mode**.

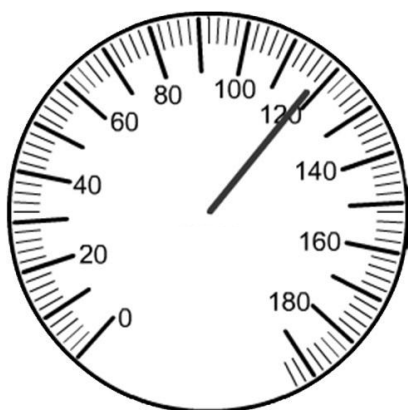
Ans: _____

b) Work out the **range**.

Ans: _____

(3 marks)

8. What is the reading on this scale?



Ans: _____

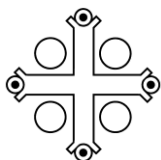
(1 mark)

9. Stefan bought 124 beads each costing 13c. Calculate the total cost of the beads.

Ans: _____

(4 marks)

END OF NON CALCULATOR PAPER



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HALF-YEARLY EXAMINATIONS – FEBRUARY 2013

FORM 1

MATHEMATICS Levels 7 – 8 **TIME: 1hr 30mins**

Main Paper

Question	1	2	3	4	5	6	7	8	9	10	Main	NC	Global Mark
Max. Mark	12	3	15	6	6	9	2	9	7	6	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.

2	4	7	8	12	29	31	49
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a. Use the numbers in the list above to answer this question. The numbers may be used more than once. From the list find:

i) **four** factors of 48 - _____

ii) **two** multiples of 7 - _____

iii) **four** prime numbers - _____

iv) **two** square numbers - _____

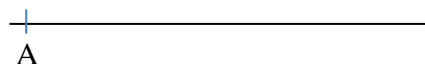
v) **one** cube number - _____

b. Write **168** as a product of prime factors.

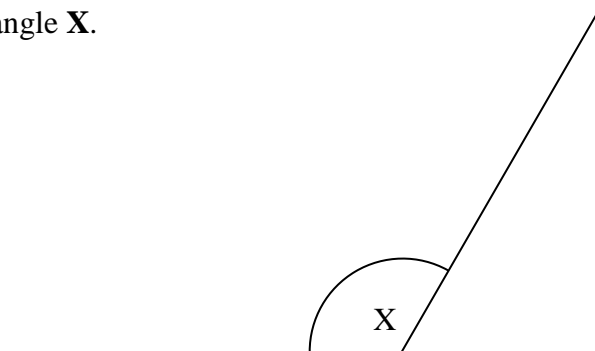
Ans: _____

(12 marks)

2. a. At point A on the line below, draw an angle of **173°**, using ruler and protractor.
Label the angle on your diagram.



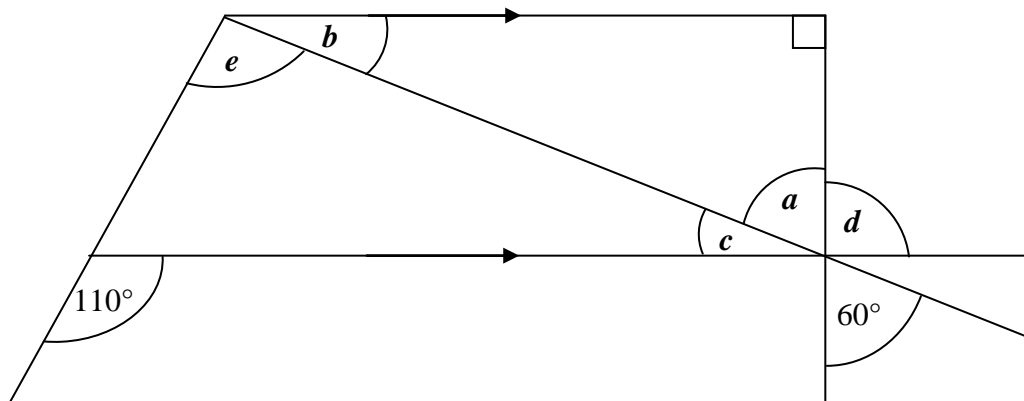
b. Measure angle **X**.



Angle X = _____°

(3 marks)

3.



Use this diagram to calculate the value of angles **a**, **b**, **c**, **d**, and **e**.
Give **reasons** for your answers.

a = _____ Reason: _____

b = _____ Reason: _____

c = _____ Reason: _____

d = _____ Reason: _____

e = _____ Reason: _____

(15 marks)

4. The following are the ages of 7 teenagers.

19 15 17 16 13 15 14

a. Calculate the **mean** age. Give your answer to the nearest whole number.

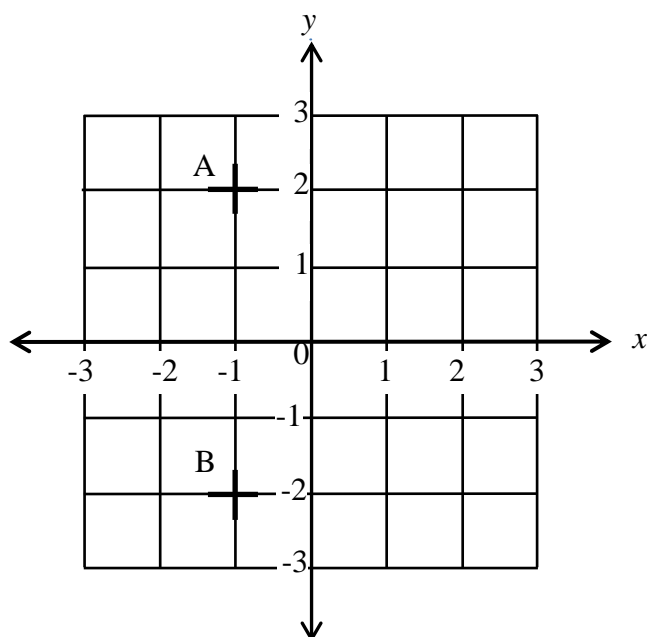
Ans: _____

b. Find the **median** age.

Ans: _____

(6 marks)

5.



a. Write down the co-ordinates of points A and B.

A (_____ , _____) and **B** (_____ , _____)

b. Plot and label point **C** (2, 2).

c. Mark and label point **D** on the graph above such that ABCD forms a rectangle.

(6 marks)

6. The following are the shoe sizes of a group of 18 people.

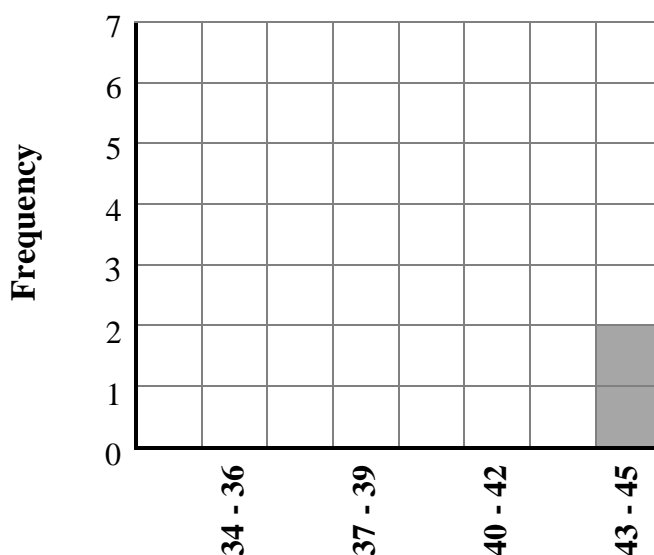
34 40 35 36 37 35 37 36 40
39 36 41 44 35 43 42 39 39



a. Complete the following frequency table:

Shoe Sizes	Tally	Frequency
34 – 36		
37 – 39		
40 – 42		
43 – 45		2

b. Complete the bar chart below:



(9 marks)

7. The ingredients needed to make 12 muffins are:

100 g flour
75 g margarine
75 g sugar
50 g dried fruit
1 egg



Write down the ratio of *margarine : flour : dried fruit*. Simplify your answer.

(2 marks)

8. Mark wants to buy a piano which costs €3450. By the end of March, he saved $\frac{1}{4}$ of this amount and another $\frac{2}{5}$ by the end of August.



- a. What **fraction** did he save altogether by the end of August?

Ans: _____

- b. What fraction does he still need to save?

Ans: _____

- c. Write your answer in (b) as a percentage.

Ans: _____

- d. Mark receives 5% of the piano's cost as a Christmas present. How much money does he receive?

Ans: _____

(9 marks)

9. a. Convert the following fractions to decimals. Show all your working.

i) $\frac{2}{5} =$ _____

ii) $\frac{3}{8} =$ _____

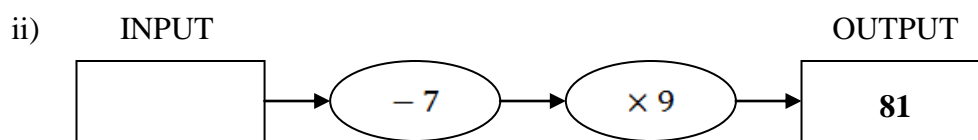
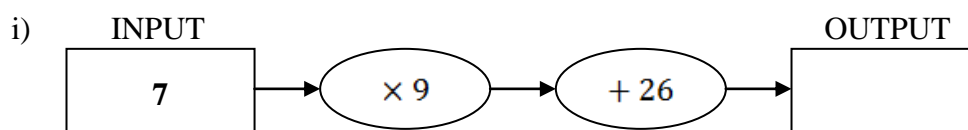
b. Arrange in order of size, largest first :

0.2 , $\frac{2}{5}$, 0.37 , $\frac{3}{8}$, 36%

Ans: _____

(7 marks)

10. a. Complete these number machines.



b. The following table shows the input (n) and its corresponding output.

INPUT (n)	4	5	6	7	8	
OUTPUT	0	1	2		4	10

i) Write down the **rule** satisfying the above table. Use n for the input value.

Ans: _____

ii) Complete the above table.

(6 marks)