

# KULLEĠĠ SAN BENEDITTU

## Secondary School, Kirkop

Mark

HALF YEARLY EXAMINATION – 2014/2015

Levels 6 – 7

YEAR 7

MATHEMATICS Levels 6 – 7

Time: 30 mins

### *Non Calculator Paper*

Name: \_\_\_\_\_

Class: \_\_\_\_\_

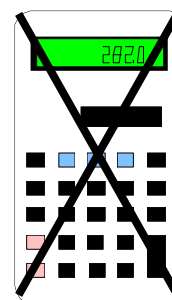
Question	1	2	3	4	5	6	7	8	NC
Max. Mark	2	4	2	2	4	2	3	6	25
Mark									

DO NOT WRITE ABOVE THIS LINE

### 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**.



1. Mum bakes a cake for her daughter's birthday .

Mum eats  $\frac{3}{8}$  of the cake and Dad eats  $\frac{1}{8}$  of the cake.

- a) What fraction do Mum and Dad eat in **all**?  
Write your answer in its' simplest form.



Ans: \_\_\_\_\_

- b) What fraction of the cake is **left**?

Ans: \_\_\_\_\_

(2 marks)

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2. Work out:

a)  $\frac{3}{8} \times \frac{2}{9}$

Ans: \_\_\_\_\_

b)  $30 \times 50$

Ans: \_\_\_\_\_

c)  $3 \cdot 2 \times 4$

Ans: \_\_\_\_\_

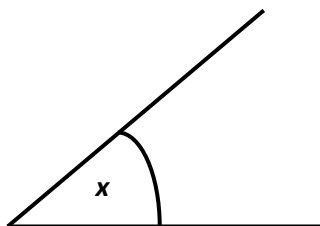
d)  $\frac{1}{5}$  of €65

Ans: € \_\_\_\_\_

(4 marks)

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3. a) **Estimate** the value of angle  $x$ .



Ans: \_\_\_\_\_

- b) Fill in:

Angle  $x$  is an \_\_\_\_\_ angle.

(2 marks)

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4. Fill in the blank spaces with the missing numbers:

a) 3, 7, 11, \_\_\_\_\_, 19, \_\_\_\_\_

b) 3, 6, 12, 24, \_\_\_\_\_, \_\_\_\_\_

(2 marks)

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5. a) Work out the following and simplify:

i)  $\frac{7}{6} - \frac{4}{6}$

Ans: \_\_\_\_\_

ii)  $\frac{5}{7} + \frac{2}{7}$

Ans: \_\_\_\_\_

b) Which is the greater fraction  $\frac{1}{3}$  or  $\frac{1}{4}$ ?

Ans: \_\_\_\_\_

(4 marks)

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6. Peter buys 13 pencils at 27c each. Find the total cost of the pencils.



Ans: \_\_\_\_\_ cents

(2 marks)

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7. Mariah picks **24 roses** and **30 daffodils** from her garden.

a) Write down the ratio of **roses : daffodils**.

Ans: \_\_\_\_\_ : \_\_\_\_\_



b) Simplify the ratio.

Ans: \_\_\_\_\_ : \_\_\_\_\_

(3 marks)

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8. Fill in the blank spaces with the correct numbers:

a) The number 70 lies between the **square numbers** \_\_\_\_\_ and \_\_\_\_\_ .

b) The first five **prime numbers** are \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ .

c) **Cube root** of 125 is \_\_\_\_\_ .

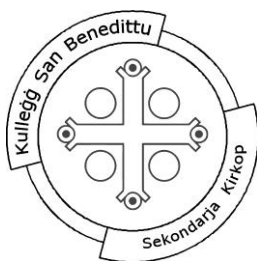
d) \_\_\_\_\_ is a **factor** of 20.

e) \_\_\_\_\_ is a **multiple** of 20.

(6 marks)

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END OF PAPER



# KULLEĠĠ SAN BENEDITTU

## Secondary School, Kirkop

Mark

### HALF YEARLY EXAMINATION – 2014/2015

Levels 6 - 7

**YEAR 7**

**MATHEMATICS** Levels 6 – 7

**Time: 1 hr 30 mins**

### *Main Paper*

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	Main	NC	Global Mark
Max. Mark	2	5	4	3	4	10	10	9	6	7	6	5	4	75	25	100
Mark																

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### INSTRUCTIONS TO CANDIDATES:

**Read all the questions carefully before you start answering.**

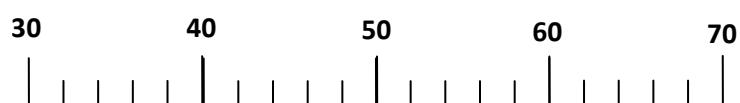
- Answer all questions.
- This paper carries 75 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.

1. Complete the table.

Fraction	Decimal	Percentage
$\frac{3}{4}$	0.75	75%
	0.9	
		35%

(2 marks)

2. a) Mark the values of **A**, **B** and **C** on the following number line:



**A** = 32

**B** = 61

**C** = 58

b) Round:

i) 234 to the nearest 10.

Ans: \_\_\_\_\_

ii) 2584 to the nearest 100.

Ans: \_\_\_\_\_

(5 marks)

3. **85%** of the teenagers taking part in a survey, believe that Cristiano Ronaldo was the most handsome footballer in the World Cup 2014.

a) Write down the percentage as a fraction in its **lowest terms**.



Ans: \_\_\_\_\_

b) If 500 teenagers took part in the survey, how many teenagers chose Ronaldo as the most handsome footballer.

Ans: \_\_\_\_\_ teenagers

**(4 marks)**

- 
4. a) Mark obtained the following answer on his calculator :

**38456**

Write down his answer in words:

Ans: \_\_\_\_\_

b) Write down in order, starting from the **biggest**: 0.052, 0.32, 0.02, 0.5

Ans \_\_\_\_\_

(3 marks)

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5. The owner of Prince the dog, needs to buy the following items from the pet shop:

- dry food at €3.20 per bag
- dog shampoo at €2.98 per bottle
- bones at 67c per bone

a) Find the total cost of a bag of dry food, a bottle of dog shampoo and 2 bones.  
Show all your working.



Ans: € \_\_\_\_\_

b) The owner pays with **two** €5 notes. How much change will he get?

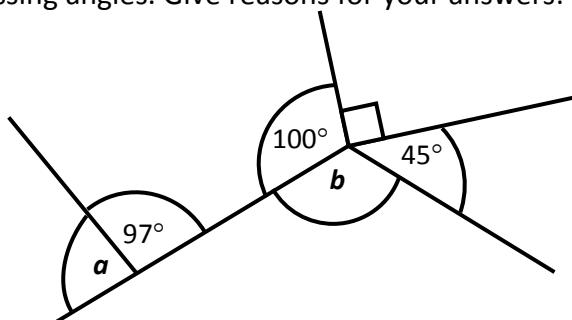
Ans: € \_\_\_\_\_

(4 marks)

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6. Work out the missing angles. Give reasons for your answers:

(a)



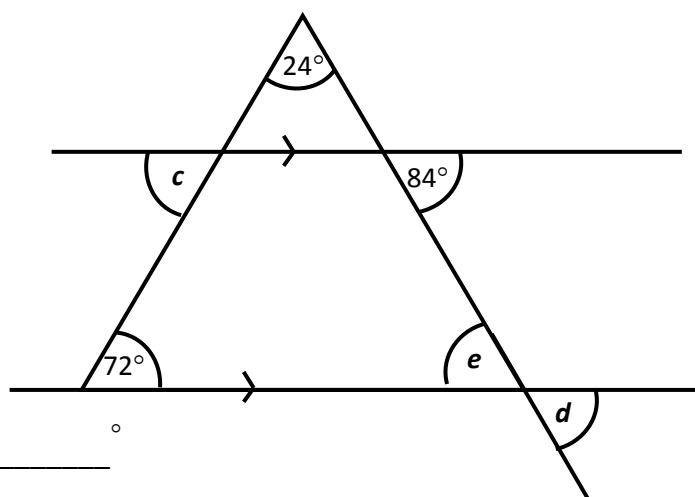
angle **a** = \_\_\_\_\_ °

reason \_\_\_\_\_

angle **b** = \_\_\_\_\_ °

reason \_\_\_\_\_

(b)



angle **c** = \_\_\_\_\_ °

reason \_\_\_\_\_

angle **d** = \_\_\_\_\_ °

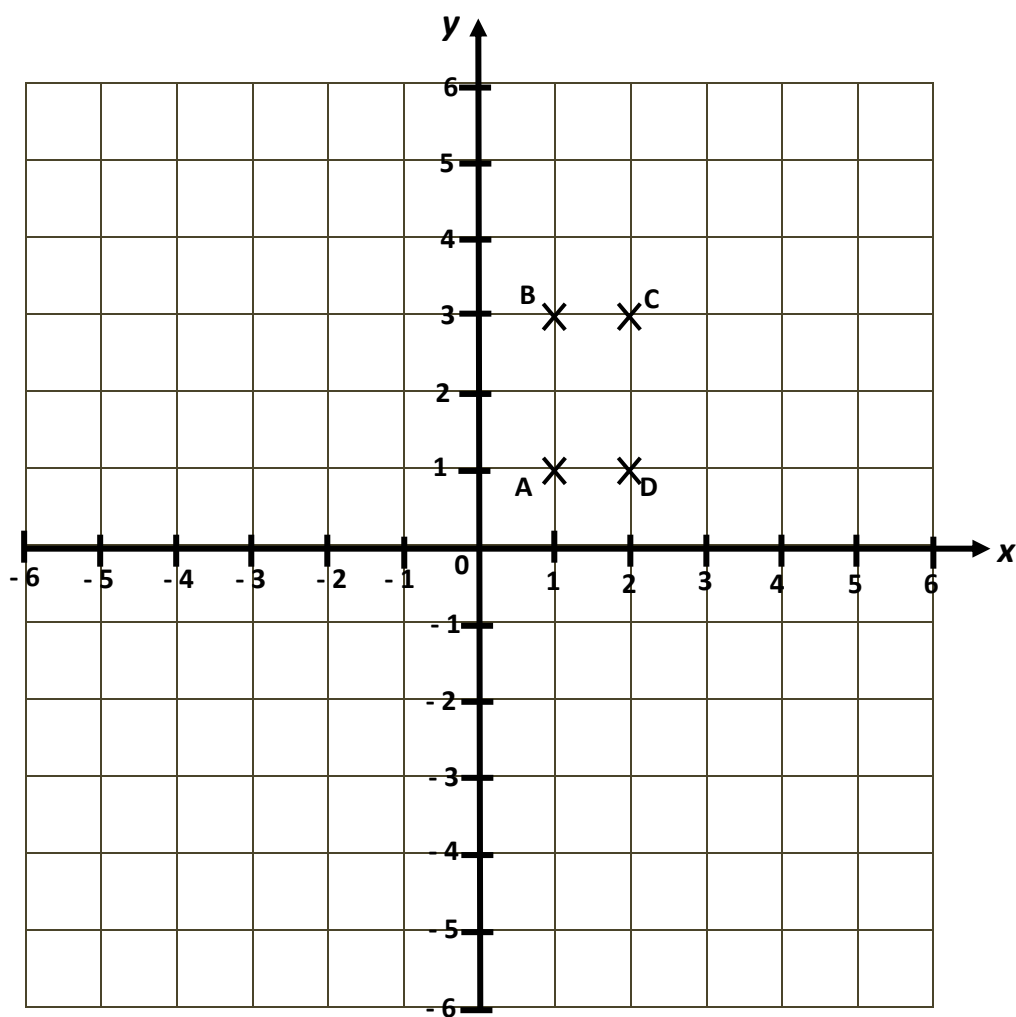
reason \_\_\_\_\_

angle **e** = \_\_\_\_\_ °

reason \_\_\_\_\_

**(10 marks)**

7. Use the following grid to answer the questions below.



a) Write down the co-ordinates of points A, B, C and D.

A ( \_\_\_\_\_, \_\_\_\_\_ )    B ( \_\_\_\_\_, \_\_\_\_\_ )    C ( \_\_\_\_\_, \_\_\_\_\_ )    D ( \_\_\_\_\_, \_\_\_\_\_ )

b) Join points A to B, B to C, and C to D.

c) Plot and label these points : E(4,1) F(3, -1) G(-2,-1) and H(-3 , 1).

d) Join the points D to E, E to F, F to G, G to H and H back to A.

**(10 marks)**

8. A group of teenagers are asked about the shoe sizes.

The results are shown in the table below :

38	36	33	37	36	41
33	40	38	33	34	39
35	37	34	43	36	40
35	37	35	37	38	39



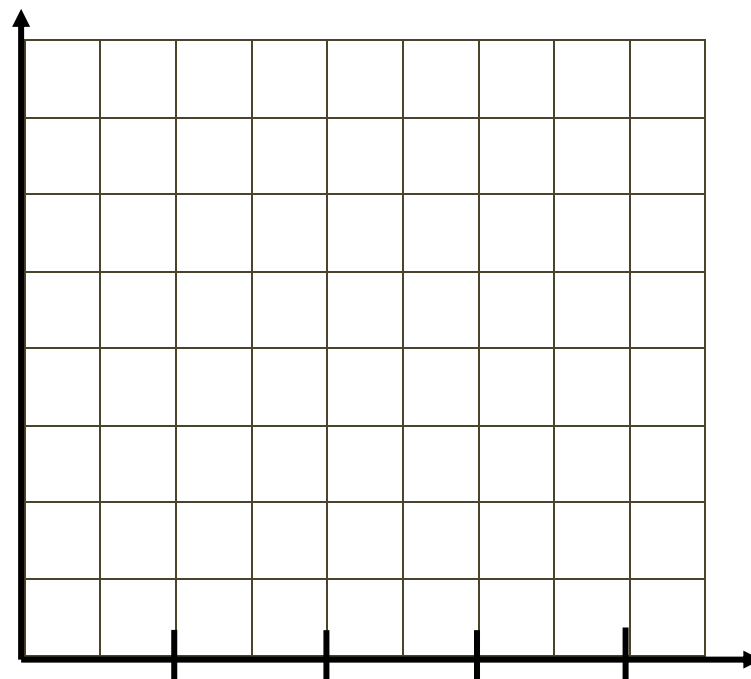
- a) Complete the following frequency table :

Shoe size	33-35	36-38	39-41	42-44
Tally				
Frequency				

- b) Which shoe size group is the most common?

Ans: \_\_\_\_\_

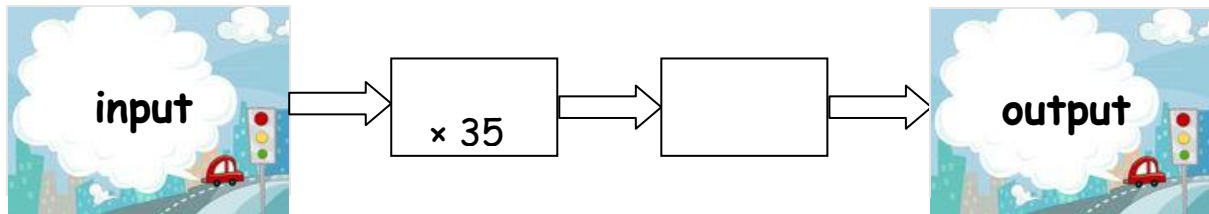
- c) Draw and label a bar chart to illustrate the information in the above table.



(9 marks)

9. Mr Douglas wants to hire a car for his holiday.  
The cost is a **fixed charge of €85** and **€35 per day**.

- a) He uses the following number machine to calculate the cost of hiring the car.  
Fill in the empty box.



- b) How much will Mr Douglas spend if he hires the car for **7 days**?

Ans: €\_\_\_\_\_

- c) If Mr Douglas spent €260, for how many days did he hire the car?

Ans:\_\_\_\_\_ days

**(6 marks)**

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10. Manchester United scored the following goals in the premier league:

**5, 3, 2, 1, 3, 3, 3, 4**

a) Work out the mean number of goals.

Ans: \_\_\_\_\_ goals

b) Find the median of their goals.

Ans: \_\_\_\_\_ goals

c) Write the mode of their goals.

Ans: \_\_\_\_\_ goals

d) Calculate the range of their goals.

Ans: \_\_\_\_\_ goals

**(7 marks)**

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11. Victoria uses the following designs on her embroidery.



1<sup>st</sup> design



2<sup>nd</sup> design



3<sup>rd</sup> design

a) Draw the **4<sup>th</sup> design**.

b) Help Victoria fill the following table :

Design Number	1	2	3	4	5	6
Number of Hearts	1	3	5			

c) What is happening to the number of hearts from one design to the next?

Ans: \_\_\_\_\_

d) How many hearts will there be in the **10<sup>th</sup> design**?

Ans: \_\_\_\_\_ hearts

**(6 marks)**

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12. Write down the value of the underlined figure in each number?

a) 9500 = \_\_\_\_\_

b) 385 = \_\_\_\_\_

c) 175 = \_\_\_\_\_

d) 135.12 = \_\_\_\_\_

e) 0.003 = \_\_\_\_\_

**(5 marks)**

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13. David is playing the game 'WATCHDOGS' and keeps a record of his scores at different levels in the following table:



Score	Level
20	40
30	60
40	80
50	
60	

- a) What pattern can you see between the score and the level?

Ans: \_\_\_\_\_

- b) Fill in the table above with the levels for score 50 and score 60.

- c) Write down the rule which connects the **Level, L**, to the **Score, S**.

Ans:  $L =$  \_\_\_\_\_

(4 marks)

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END OF PAPER