

KULLEĠĠ SAN BENEDITTU
Boys Secondary School, Kirkop
HALF-YEARLY EXAMINATIONS – FEBRUARY 2012

FORM 2

MATHEMATICS

TIME: 30 mins

Non Calculator Paper

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

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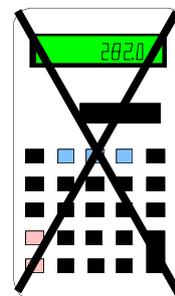
NAME AND SURNAME: _____

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



1. Work out:

a) $€6.25 + €12.86$

b) $€10 - €1.95$

Answers: a) _____

b) _____

(3 marks)

2. Round 15.24 to 1 decimal place.

Answer: _____

(1 mark)

3. a) Fill in: $\frac{3}{5} = \frac{\square}{20}$

b) Write $\frac{15}{18}$ in its simplest form.

Answer: _____

c) Work out:

(i) $\frac{3}{7} + \frac{2}{7}$

Answer: _____

(ii) $\frac{3}{9} - \frac{1}{9}$

Answer: _____

(iii) $\frac{1}{4} \times 20$

Answer: _____

(5 marks)

4. Find the mean, median, mode and range of the following set of numbers:

9, 2, 5, 2, 3, 6, 8

Answers: Mean = _____
Median = _____
Mode = _____
Range = _____
(4 marks)

5. Work out:

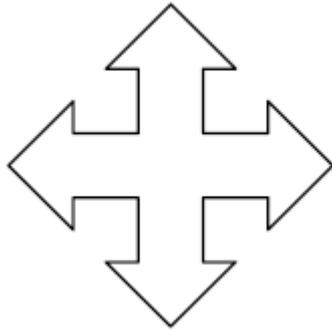
- a) $6 \times 1000 =$ _____
- b) $2.56 \times 100 =$ _____
- c) $5300 \div 100 =$ _____
- d) $75.3 \div 10 =$ _____

(4 marks)

6. Matthew buys 10 boxes of chocolates each costing €2.50. How much does he spend?

Answer: _____
(2 marks)

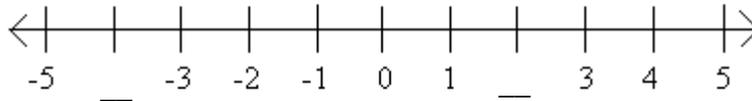
7. What is the order of rotation symmetry of this shape?



Answer : _____

(1 mark)

8. a) Fill in the missing numbers on the number line.



b) Use the number line to work these out.

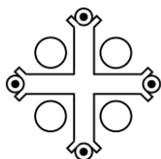
i) $5 - 8 =$ _____

ii) $-1 + 4 =$ _____

c) The temperature in Milan at midnight was -3°C . If the temperature **went up** by 6°C by noon, what was the temperature at noon?

Answer : _____

(5 marks)



KULLEĠĠ SAN BENEDITTU
Boys Secondary School, Kirkop

C

HALF-YEARLY EXAMINATIONS – FEBRUARY 2012

FORM 2

MATHEMATICS Scheme C

TIME: 1hr 30mins

Main Paper

Question	1	2	3	4	5	6	7	8	9	10	11	12	Main	NC	Global Mark
Max. Mark	7	10	8	6	8	8	6	4	7	3	4	4	75	25	100
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 75 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.

1. a) 5368 tickets were sold for a concert. Round this number

i) to the nearest 10 _____

ii) to the nearest 1000 _____

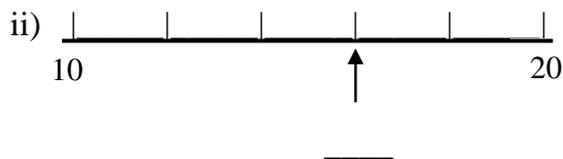
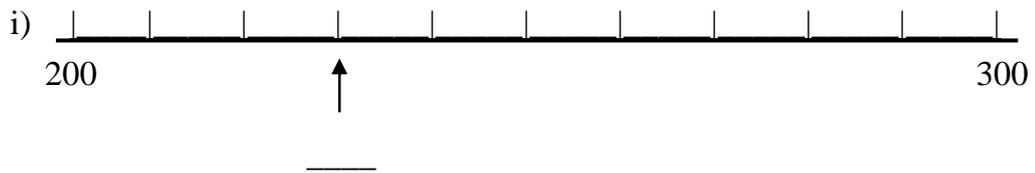
b) Put in order starting from the smallest:

i) 4063, 4306, 4 thousand, 31004

ii) 5.2, 5, 3.5, 3.9

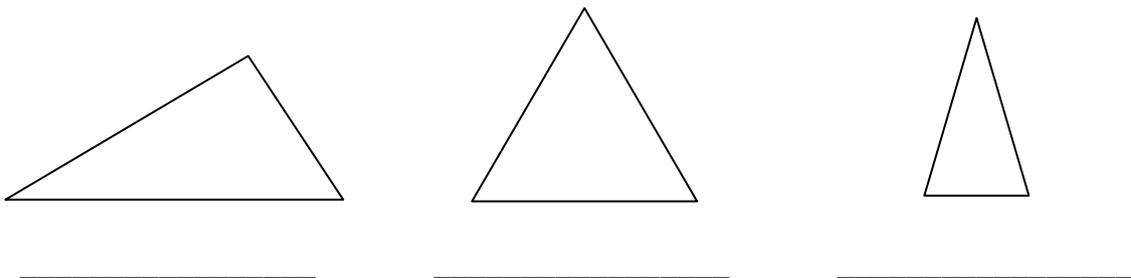
iii) 5°C , 0°C , 2°C , -1°C

c) Write down the number indicated by the arrow in the figures below:

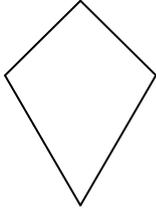
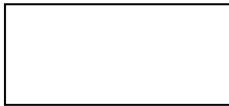
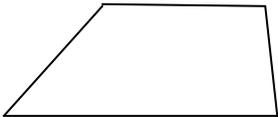


(7 marks)

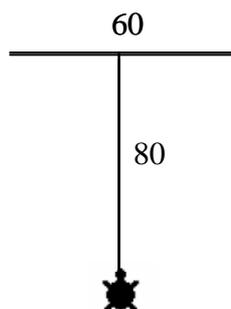
2. a) Label these triangles using the words: isosceles, scalene and equilateral.



b) Complete the table:

	Name of Shape	How many lines of symmetry?
	kite	1
		
		
	square	
		0

c) Nicole wants to draw this shape using LOGO. Fill in the blanks for her.



PD FD ____ RT ____ FD30 BK60

(10 marks)

3. a) Complete these conversions:

- i) 1 m = _____ cm
- ii) 2 kg = _____ g
- iii) 5000 m = _____ km
- iv) 1.3 litres = _____ ml
- v) 3 hours = _____ minutes

b) Yesterday I went shopping and bought a diary costing €4.55, a pen costing 83c and a gift costing €15. How much did I spend in all?

Answer: _____

(8 marks)

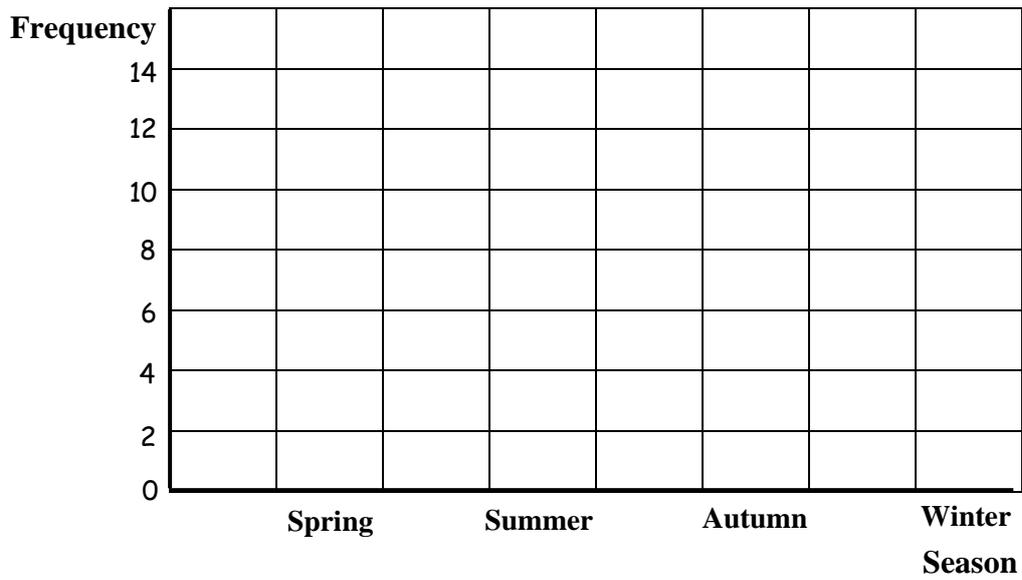
4. A group of children were asked to choose their favourite season. The following are the results:

summer winter summer summer spring winter
autumn summer spring summer spring spring
winter summer summer summer spring spring
autumn summer summer spring spring summer
summer spring summer summer

a) Fill in the tally chart

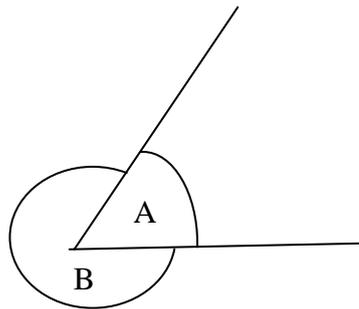
<u>Season</u>	<u>Tally</u>	<u>Frequency</u>
Spring		
Summer		
Autumn		
Winter		3
Total:		

b) Display the data on the bar chart.



(6 marks)

5. a)



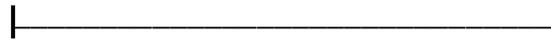
i) Use a protractor to **measure** angle A.

Answer: A = _____°

ii) **Calculate** the size of angle B.

Answer: B = _____°

b) Draw an angle of 105° on the line provided.



c) Label the following angles as *acute*, *obtuse*, *reflex* or *right angle*.

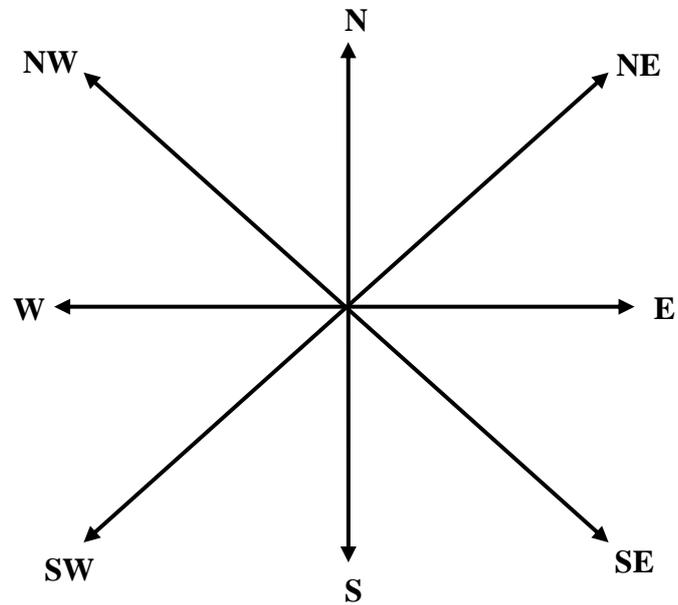
200° _____

90° _____

43° _____

132° _____

d) Fill in :



Direction	Compass Bearing
East	090°
_____	045°
West	_____

(8 marks)

6. a) Use your calculator to work out:

i) $40 - (-20) = \underline{\hspace{2cm}}$

ii) $-523 + 260 = \underline{\hspace{2cm}}$

iii) $\frac{3}{5} \times 60 = \underline{\hspace{2cm}}$

b) Complete this table:

Fraction	Decimal	Percentage
$\frac{1}{4}$	0.25	25%
$\frac{1}{2}$	$\underline{\hspace{1cm}}$	$\underline{\hspace{1cm}}$
$\underline{\hspace{1cm}}$	0.2	$\underline{\hspace{1cm}}$

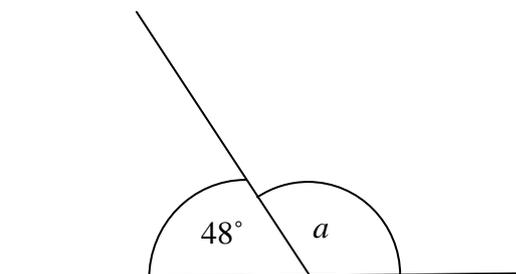
c) Jake ate $\frac{1}{2}$ of his pizza and John ate 70% of his pizza. Who ate most?

Answer: $\underline{\hspace{2cm}}$
(8 marks)

7. **Calculate** each lettered angle.

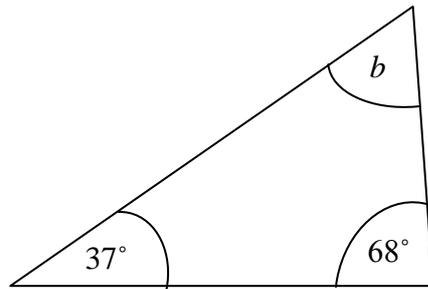
Note: The diagrams are not to scale so you cannot measure the angles with a protractor.

a)



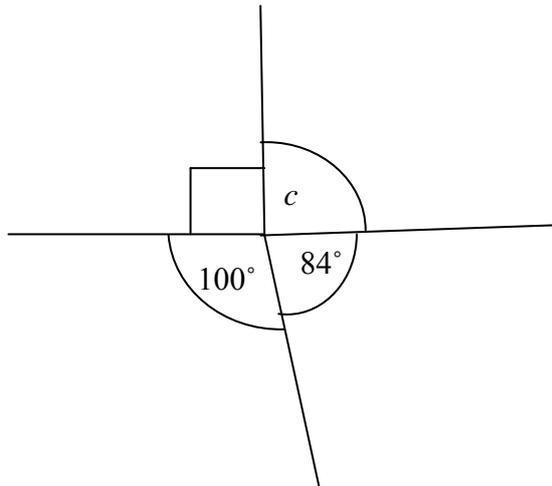
$a = \underline{\hspace{2cm}}$

b)



$b =$ _____

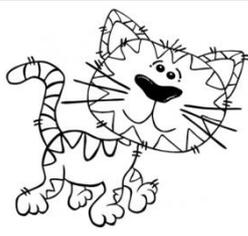
c)



$c =$ _____

(6 marks)

8. Look at this advert:

<p>Cat World</p> <p>Adult €8 Children €5</p> 
--

a) Complete this formula:

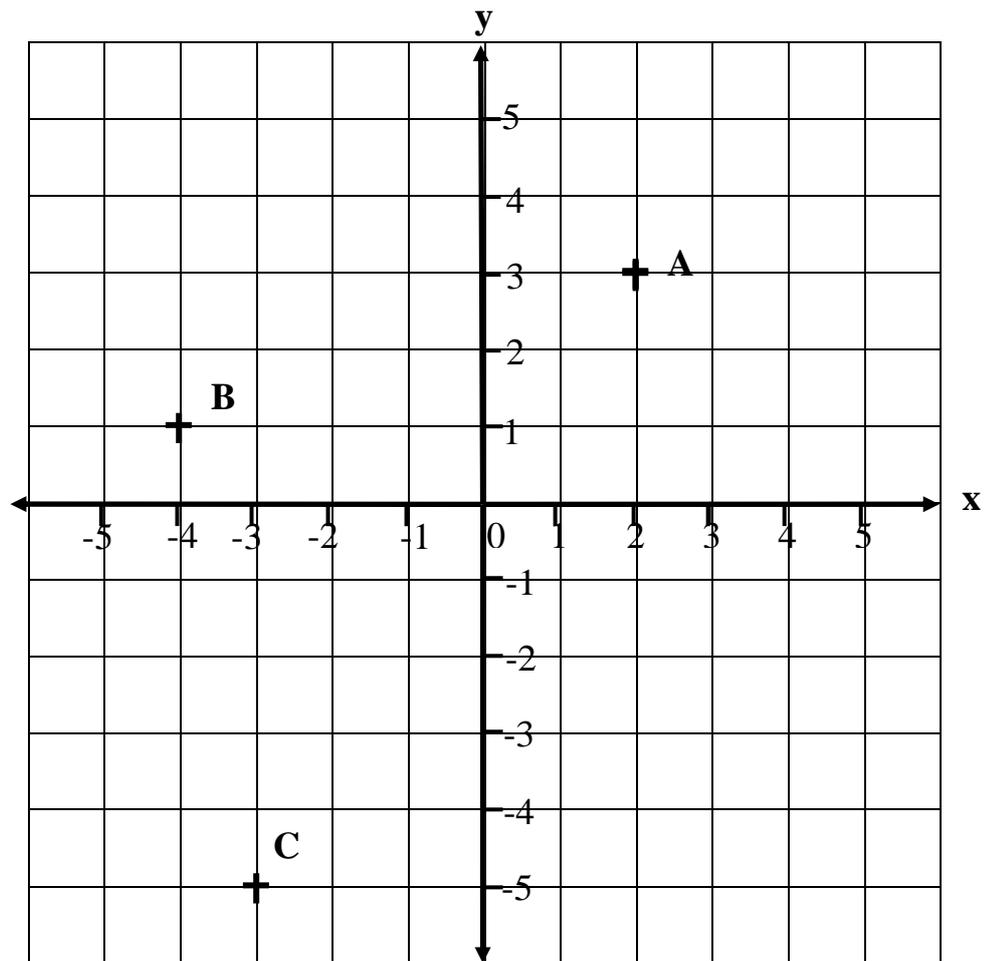
Cost (€) = $8 \times$ number of + \times number of children

b) How much does it cost for 2 adults and 4 children?

Answer: _____

(4 marks)

9.



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

A (___ , ___) B (___ , ___) C (___ , ___)

b) Mark and label the following points on the graph.

D (3, -4) E (0, 5) F (-5, -1)

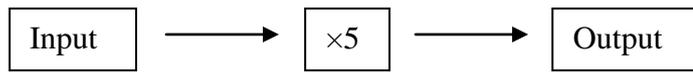
c) What do I call the point (0, 0)?

Answer: _____
(7 marks)

10. a) Work out the value of $2 \times a + 5 \times b - c$ when $a = 3$, $b = 4$ and $c = 2$.

Answer: _____

b) Look at this number machine:



What is the output when the input is 6?

Answer: _____

(3 marks)

11. In a survey 40 students were asked to name their favourite colour. The pie chart shows the results.

a) Which colour did half the students choose?

Answer: _____

b) What fraction chose yellow?

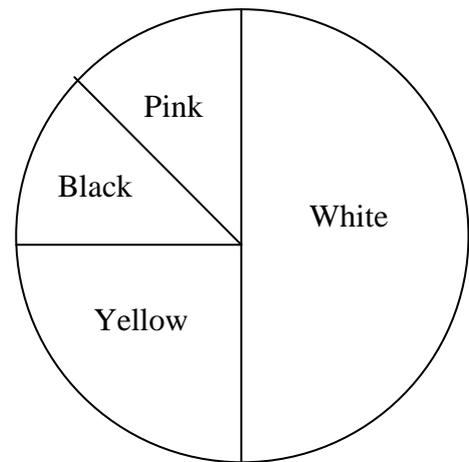
Answer: _____

c) How many chose yellow?

Answer: _____

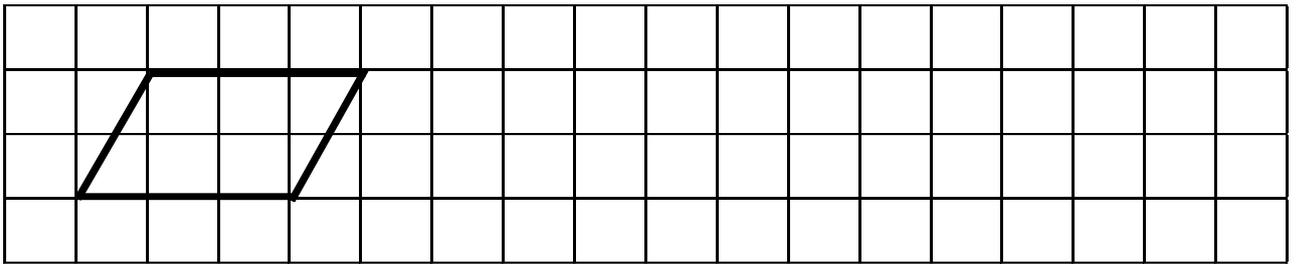
d) What fraction chose pink?

Answer: _____

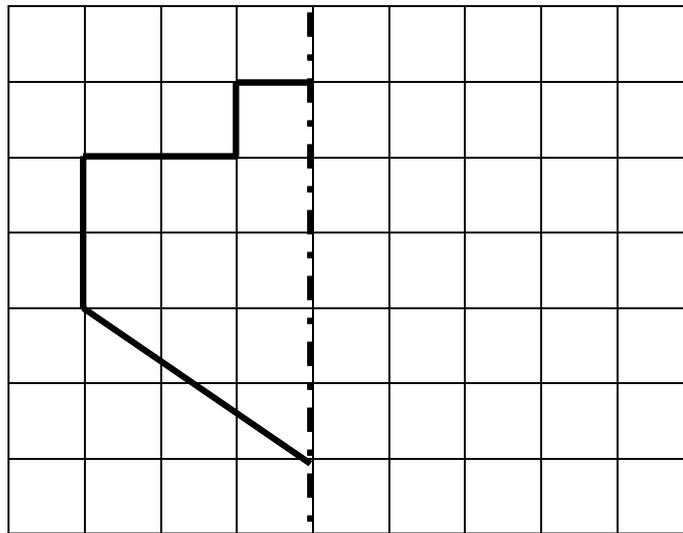


(4 marks)

12. a) Make a tessellation using this shape. Draw another 4 shapes.



b) Draw the reflection in the line of symmetry.



(4 marks)