KULLEĠĠ SAN BENEDITTU

Boys Secondary School, Kirkop

D

HALF-YEARLY EXAMINATIONS – FEBRUARY 2012

FORM 3   **MATHEMATICS** Scheme D   **TIME: 30 mins**

Non Calculator Paper

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

DO NOT WRITE ABOVE THIS LINE

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

<u>**INSTRUCTIONS TO CANDIDATES**</u>:

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**.
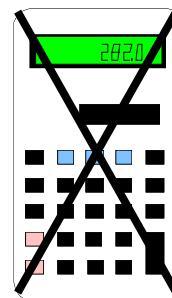
1. a) Write in figures: one thousand and forty six. _____

   b) Write 3.956 correct to 2 decimal places. _____

   (2 marks)

2. Work out the following money sums:

   a) 6638 + 570   b) €20 - €16.45

   _____   €_____

   c) 50% of €60

                                              €_____

   (4 marks)

3. Work out the following:

   a) 6.25 x 100 = _____

   b) 6.25 ÷ 100 = _____

   (2 marks)

4. From the following list of numbers, choose the required number:

$$\{ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 \}$$

   a) an even number _____

   b) an odd number _____

   c) a square number _____

   d) a prime number _____

   e) a factor of 20 _____

(5 marks)

5. Complete the following sequences:

   a) 1, 4, 7, 10, ____, ____.

   b) 1, 4, 9, 16, ____, ____.

   c) 1.25, 1.5, 1.75, 2, ____, ____.

(5 marks)
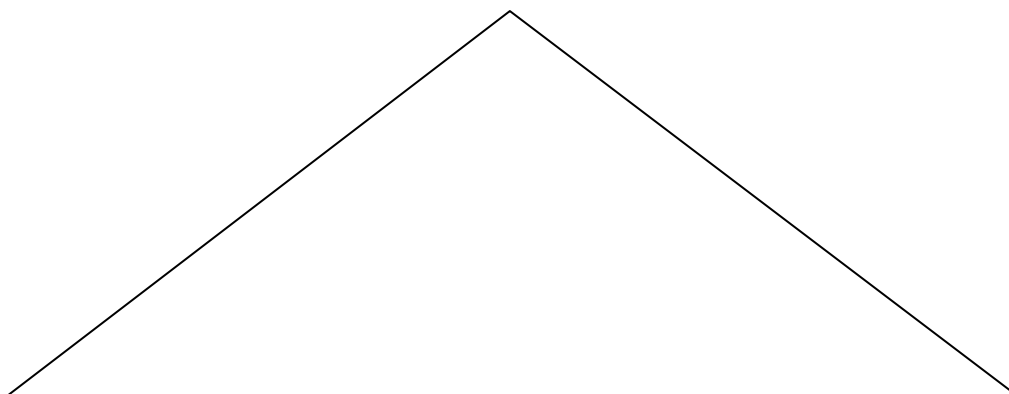
6. Fill in the blanks:

$$\frac{1}{4} = \frac{\quad}{100} = \underline{\quad}\%.$$

(2 marks)

7. Write any number between the two given numbers.

2.5 _____ 2.6

(1 mark)

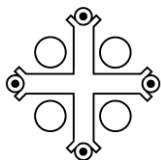8. Mark the **equal sides** and **equal angles** of this triangle:

9. Work out:

   a) 2 × (3 + 5)

   _____

   b) $\dfrac{3}{5} + \dfrac{1}{5}$

   _____

   (2 marks)

END OF PAPER

KULLEĠĠ SAN BENEDITTU

Boys Secondary School, Kirkop

HALF-YEARLY EXAMINATIONS – FEBRUARY 2012

| FORM 3 | | | | **MATHEMATICS** Scheme D | | | | | | | | **TIME: 1hr 30mins** |

Main Paper

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

1a) Round 3949 to the nearest:
      i)   ten ≈   _____
      ii)   hundred ≈   _____

  b) Convert the following units to metres:
      i) 250 cm = _____m
      ii) 250 km = _____m

  c) Put in order, **smallest** first:
        0.45   0.5   0.05   0.315

      _____   _____   _____   _____

                                                    (7 marks)
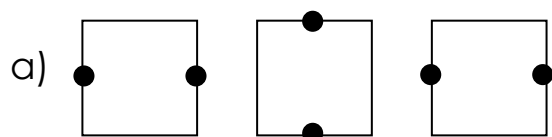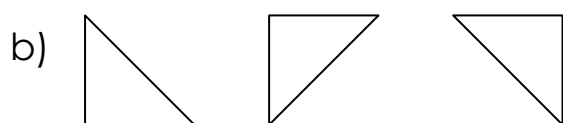
2) Complete the following sequences:

   a) 9, 11, 13, 15, ____, ____.

   b) 1, 8, 27, ____, ____.

   c) -6, -4, -2, ____, ____.

   d) 1, 2, 4, 8, ____. ____.
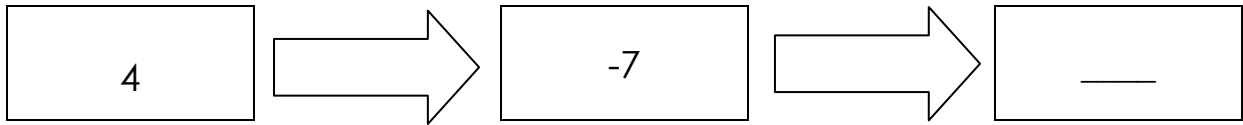
(8 marks)

3) Draw the **next** shape in the pattern.

a)

_____

b)

_____

(4 marks)

4) Fill in the blanks:

FRACTION	DECIMAL	PERCENTAGE
$\frac{1}{4}$	0.25	25%
$\frac{3}{4}$		
	0.2	
		30%
	0.45	

(8 marks)

5) Fill in the blanks:

a)

| 4 | ➡ | -7 | ➡ | ___ |

b)

| ___ | ➡ | + 5 | ➡ | 8 |

c)

| 35 | ➡ | ÷ 7 | ➡ | ___ |

d)

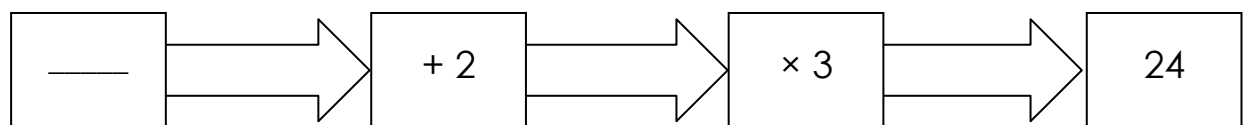| ___ | ➡ | × 6 | ➡ | 24 |

e)

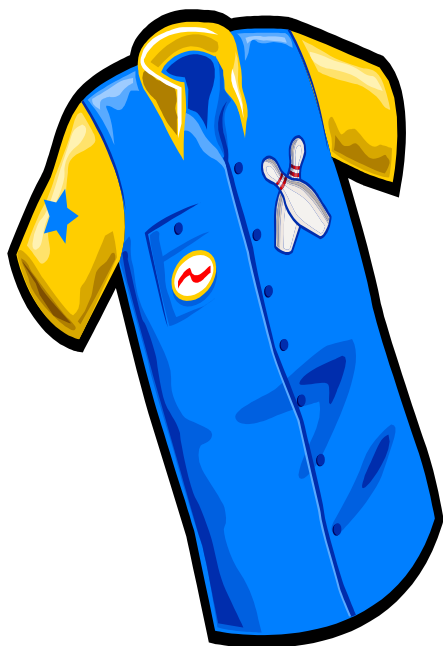| ___ | ➡ | + 2 | ➡ | × 3 | ➡ | 24 |
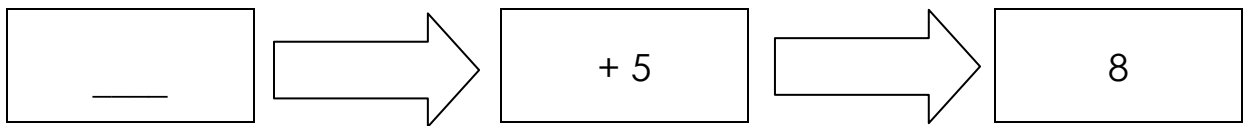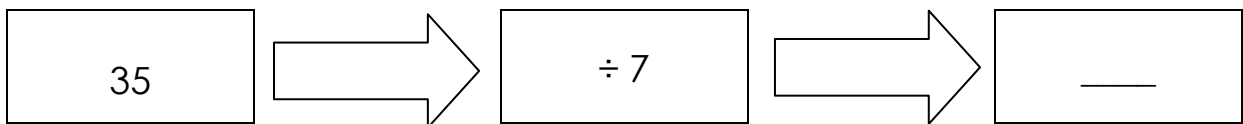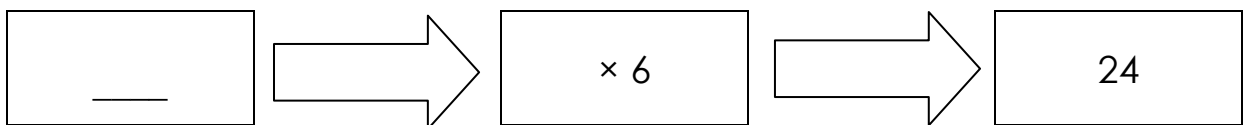
(9 marks)

6)

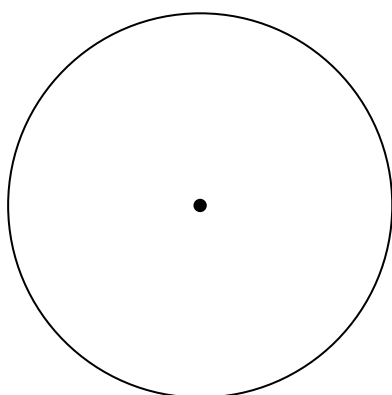a) A shirt costs €16. What is the cost of 5 shirts?

_____

b) During a sale, all prices are reduced by 25%. Find:

i)   the amount of money that I **save** on one shirt ?

_____

ii)   the sale price of one shirt.

_____

(7 marks)

7)

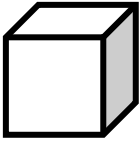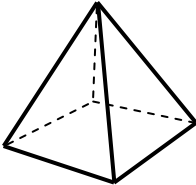a) On the circle below **draw** and **label** the **radius**

b) If the radius of a circle is 8 cm, find the length of the diameter.
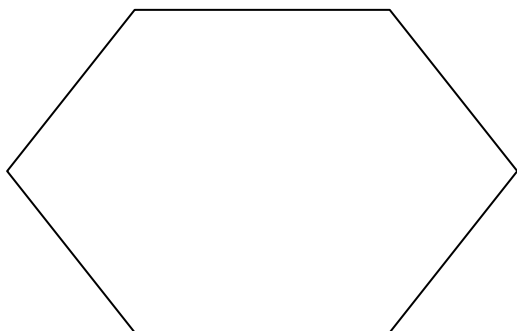
_____cm

(3 marks)

8) Fill in the **12** spaces of the following table.
Choose a name from the list below.

Cuboid   cube   cylinder   pyramid   sphere

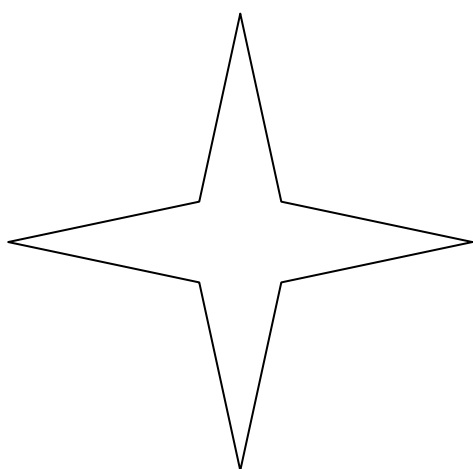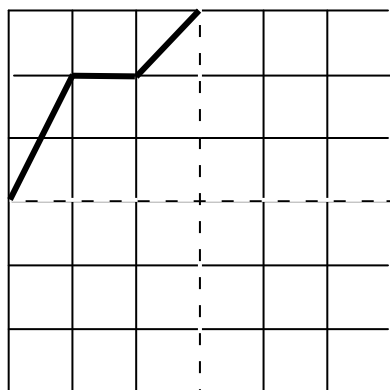| Shape	Name	faces	edges	vertices
		6		
			8	
				0
	cone	2		

(12 marks)

9)

a i) What is the name of the shape?

_____

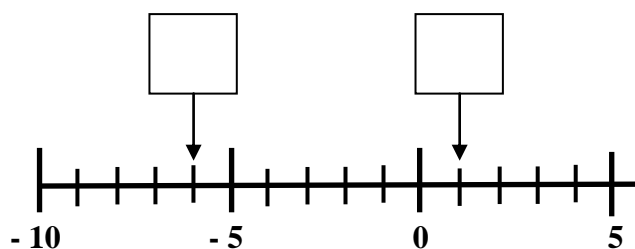ii) Draw the lines of symmetry of the shape.

_____

b) Shade $\frac{1}{4}$ of this shape.

c) Complete the shape to make **symmetrical** about the broken lines.

(7 marks)

10. a) Fill in the numbers in the 2 boxes shown on the number line.

- 10   - 5   0   5

b)

These temperatures were recorded in the city of Moscow on 1st February 2012 at different times of the day.

Time	Temperature in °C
midnight	- 7
5 a.m.	- 10
11 a.m.	1
4 p.m.	6
9 p.m.	- 2

Fill in:

i) The **highest** temperature was   _____°C

ii) The **lowest** temperature was   _____°C

iii) The **difference** in temperature between **midnight** and **5 a.m.** was

_____°C

iv) The **difference** in temperature between **5 a.m.** and **4 p.m.** was

_____°C

v) At 11 p.m. the temperature has **fallen** by 4°C from the value recorded at 9 p.m.
The temperature at 11 p.m. was

_____°C

(10 marks)