

KULLEĠ SAN BENEDITTU
Boys Secondary School, Kirkop

D

HALF-YEARLY EXAMINATIONS – FEBRUARY 2014

FORM 4

MATHEMATICS Scheme D

TIME: 20 mins

Non Calculator Paper

Mark

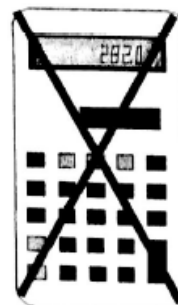
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NAME AND SURNAME: _____ **CLASS:** _____

INSTRUCTIONS TO CANDIDATES:

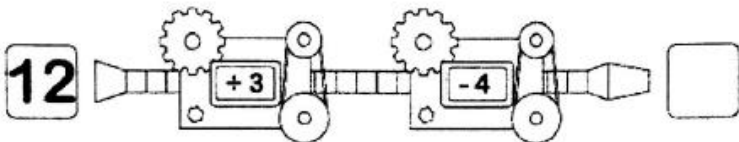
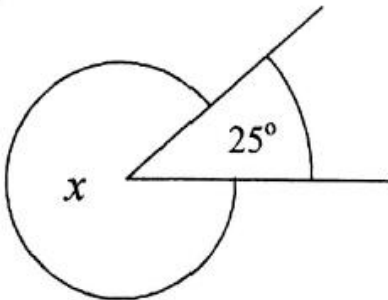
Read all the questions carefully before you start answering.

- Answer all questions.
- This paper carries 20 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.
- You are not required to show your working. However, space for working is provided if you need it.

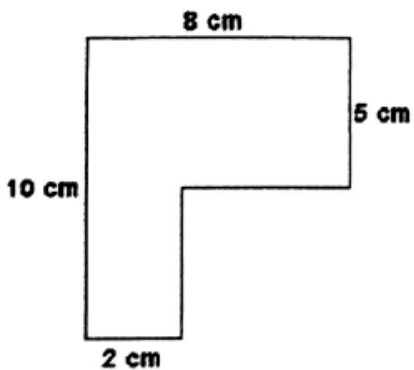


No.	Question	Space for working, if required.
1	<p>Write the following number in words:</p> <p style="text-align: center;">10 550</p> <hr/> <hr/>	
2	<p>Write in figures:</p> <p>Five thousand four hundred sixty four</p> <p style="text-align: center;">Answer : _____</p>	
3	<p>What is the value of 5 in this number?</p> <p style="text-align: center;">1527</p> <p style="text-align: center;">Answer : _____</p>	
4	<p>One of these numbers is a prime number. Which one is it?</p> <p style="text-align: center;">A) 267 B) 765 C) 327 D) 37</p> <p style="text-align: center;">Answer : _____</p>	



5	<p>Fill in the missing number:</p> <p>10 15 ____ 25 30</p>	
6	<p>Write down the output of this number machine in the empty box.</p> 	
7	<p>Fill in the box.</p> $0.4 = \frac{\square}{5}$	
8	<p>Change this into an improper fraction.</p> $2\frac{2}{3} = \frac{\square}{3}$	
9	<p>Find the size of x.</p>  <p>Answer : _____</p>	



10	<p>Work out:</p> $216.3 \div 100$ <p>Answer: _____</p>	
11	<p>A stone weighs 2.36 kg.</p> <p>What is its weight in grams?</p> <p>A) 236 B) 23600 C) 0.236 D) 2360</p> <p>Answer: _____ g</p>	
12	<p>$\frac{18}{30}$ is equal to</p> <p>a) $\frac{3}{5}$, b) $\frac{1}{3}$, c) $\frac{8}{10}$, d) $\frac{9}{11}$</p> <p>Answer: _____</p>	
13	<p>Find the perimeter of this shape</p>  <p>Answer : _____</p>	
14	<p>Work out:</p> $9 - 15 = \underline{\hspace{2cm}}$	

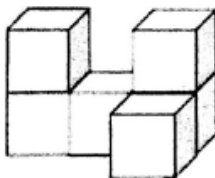


- 15 The turtle starts from the position shown.
Sketch the figure drawn by the turtle for
this set of LOGO commands:

PD FD 100 RT 90 FD 50 RT 90 FD 100

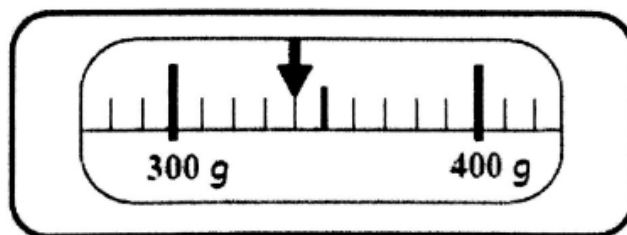


- 16 Each cube has side **2 cm**.
What is the **volume** of the shape?



Answer : _____

17



Look at the diagram

The arrow is pointing at _____g



18	<p>Work out:</p> $2 \times (8 - 3) =$ <p>Answer : _____</p>	
19	<p>An aeroplane carries 160 passengers when full.</p> <p>How many passengers does the aeroplane carry when it is $\frac{3}{4}$ full?</p> <p>Answer : _____</p>	
20	<p>Put these numbers in ascending order (smallest first):</p> <p style="text-align: center;">0.98 98 0.098</p> <p style="text-align: center;">_____</p>	

END OF PAPER





KULLEG SAN BENEDITTU
Boys Secondary School, Kirkop

D

HALF-YEARLY EXAMINATIONS – FEBRUARY 2014

FORM 4

MATHEMATICS Scheme D

TIME: 1hr 40mins

Main Paper

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

1. Are the following statements **True** or **False**?

a) 1 is a **cube** number. _____

b) 36 is a **square** number. _____

(2 marks)



2. Tom has the following answer on the calculator:

1682.5432

- a) This number correct to the **nearest 100** is _____ .
- b) This number correct to **one decimal place** is _____ .
- c) This number correct to **three decimal places** is _____ .
- d) This number correct to the **nearest 10** is _____ .
- e) This number correct to the **nearest 1000** is _____ .

(5 marks)

3. a) **Work out** the following:

$$435 - 234 + 657 = \underline{\hspace{2cm}}$$

b) Two of the following numbers lie **between** $\frac{1}{5}$ and $\frac{9}{10}$

$$2\frac{1}{2}$$

$$\frac{3}{4}$$

$$1$$

$$\frac{4}{5}$$

The numbers are _____ and _____.

(4 marks)



4. a) Fill in the spaces

i. 2 litres = _____ ml

ii. 1900 ml = _____ litres

iii. _____ m = 10 cm

iv. 5 m = _____ mm

b) Match the following to their unit.

Fuel in a car

Kg

The mass of a mouse

Gram

The length of your thumb

Metre

Your mass

litre

The length of a playing field

cm

The medicine on a teaspoon

ml

(8 marks)

5. Fill in using the numbers below:

-4

-2

-7

-5

2

8

a) _____ + 2 = 0

c) $2 \times$ _____ = -14

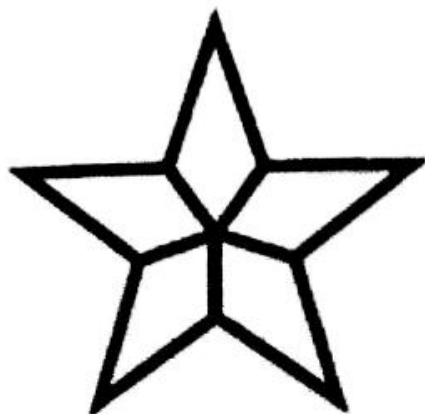
b) _____ \div -4 = -2

d) _____ + - 2 = -7

(4 marks)



6. a) Shade $\frac{3}{5}$ of the shape.



b) Write as an equivalent fraction.

$$\frac{3}{5} = \frac{\square}{15}$$

c) Work out

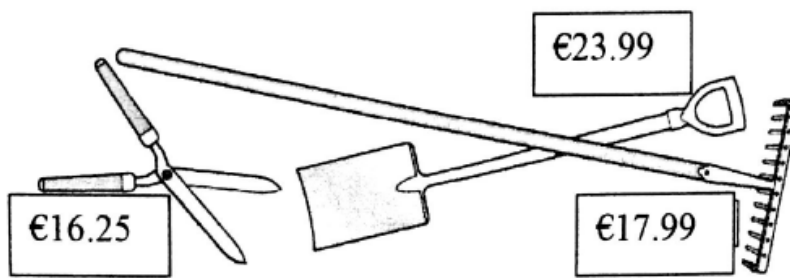
$$\frac{3}{5} - \frac{2}{15} =$$

Ans : _____

(4 marks)



7) a) John buys some tools for his garden.



How much does he spend altogether?

Ans : € _____

b) Here is a greengrocer's bill.

i) Complete it.

3 lemons at 21c each	
4 grapefruit at 35c each	
1.5 kg potatoes at €0.96 a kg	
TOTAL	€ _____

ii) What **change** does he get if he pays with a €20 note?

Ans : € _____

(9 marks)



8) In a Form 4 class:

**10% of the pupils have a dog.
40% of the pupils have a cat.
The rest have a fish.**

a) What is the percentage of pupils who do not have a dog?

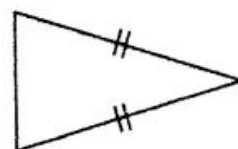
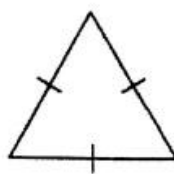
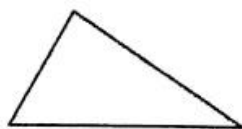
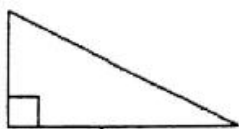
Ans : _____

b) In this class there are 20 pupils.
Work out how many pupils have a fish.

Ans : _____

(5 marks)

9) Join each triangle to its correct name.



Scalene
triangle

Isosceles
triangle

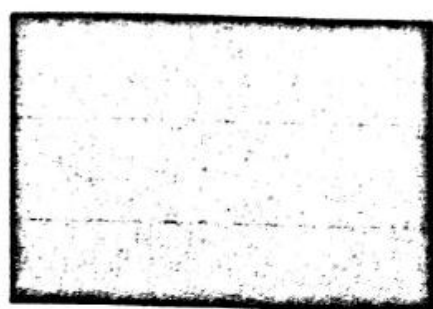
Right-angled
triangle

Equilateral
triangle

(2 marks)



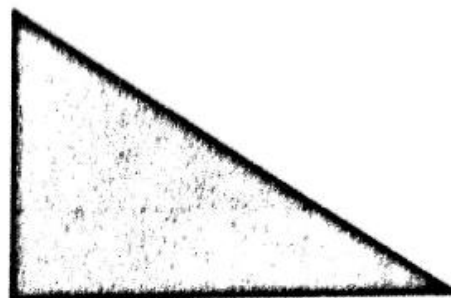
10) a) Find the **area** of the rectangle and triangle:



10.6 cm

5.8 cm

5.8 cm

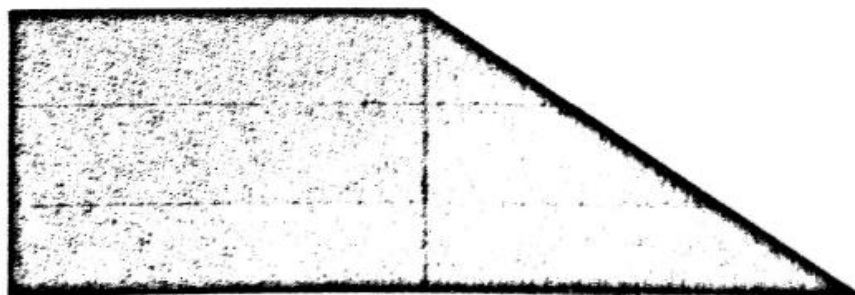


5.8 cm

Answer _____ cm^2

Answer _____ cm^2

b) The rectangle and triangle are joined together to form this shape:

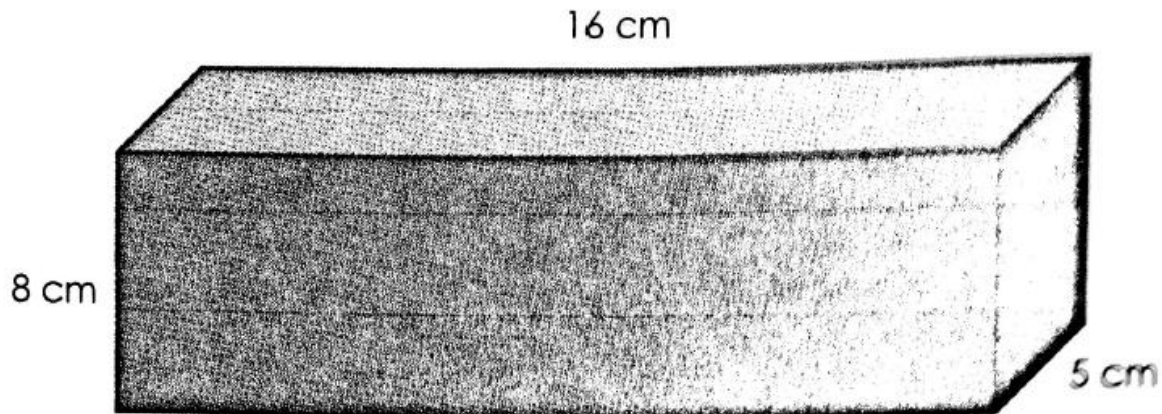


Find the **total area** of this shape:

Answer: _____ cm^2



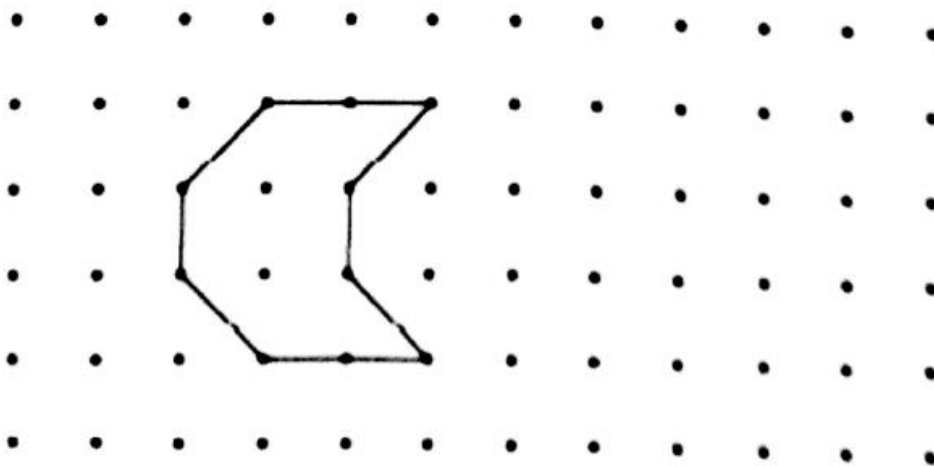
c) Find the **volume** of the cuboid:



Answer: _____ cm^3

(8 marks)

11) Tessellate this shape two more times.



(3 marks)

- 12) Carla takes **five** books to school.
These books and Carla's bag weigh
4.5 kg together.



- a) The books weigh **750 g, 0.6 kg, 700 g, 420 g** and **1 kg**.

Work out the **total weight** of these **five books**.
Give your answer in **kg** and **g**.

Answer: _____kg _____g

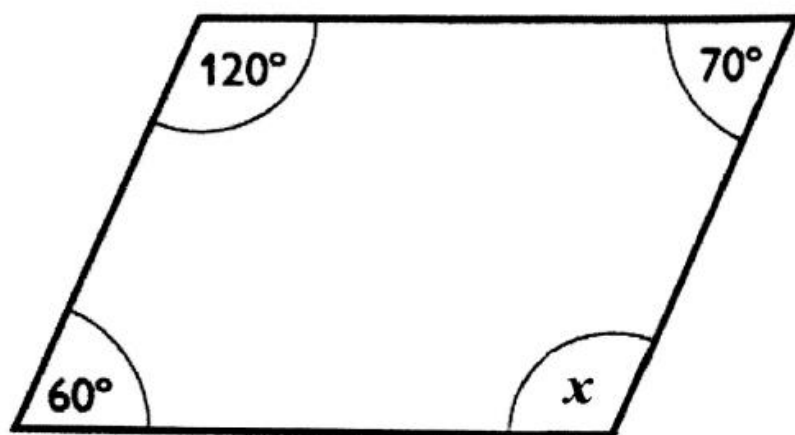
- b) Work out the **weight** of Carla's **empty bag**.

Answer: _____kg _____g

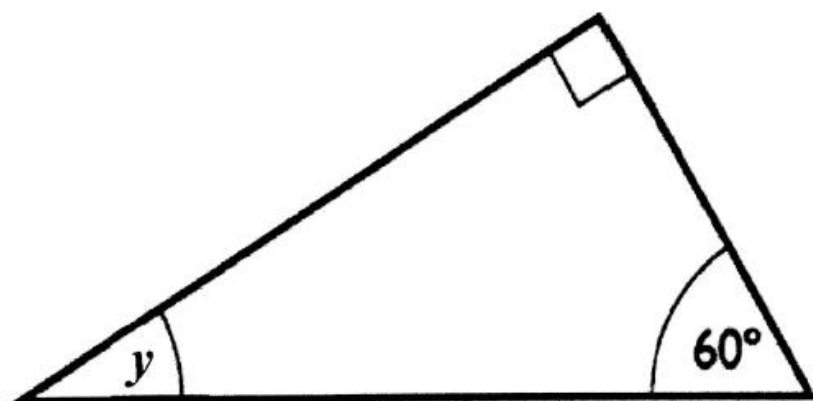
(5 marks)



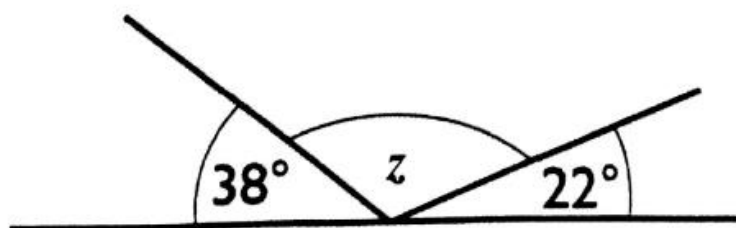
13) Find the **size** of each angle marked with a letter.



$x =$ _____ °



$y =$ _____ °

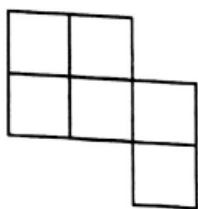


$z =$ _____ °

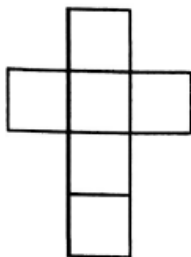
(9 marks)



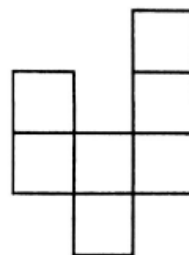
- 14) a) One of the nets shown is that of a cube. Which one is it?
Tick (✓) the correct answer.



A



B



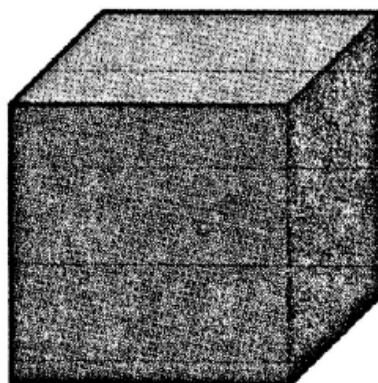
C

- b) **Fill in** : A cube has :

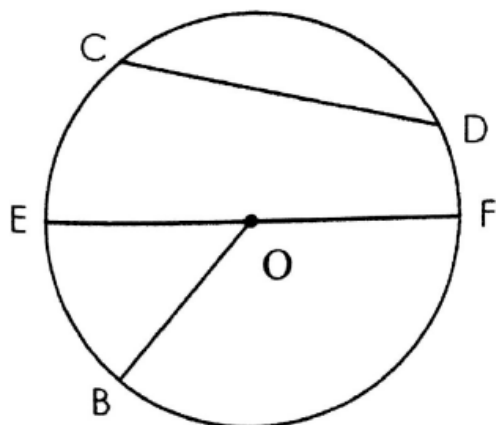
_____ faces

_____ edges

_____ vertices



- c) Look at the diagram and fill in the blanks.



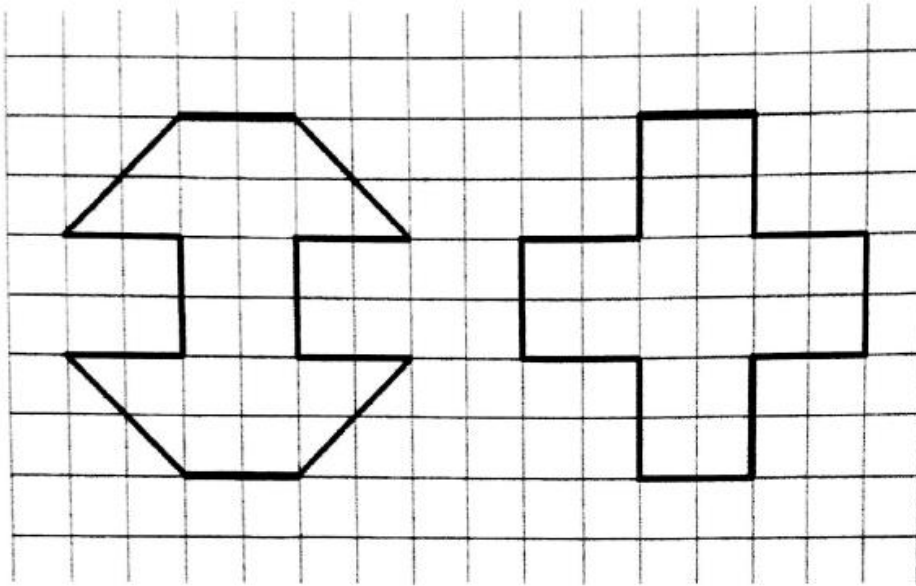
i. **OB** is called the _____.

ii. _____ is called the **diameter**.

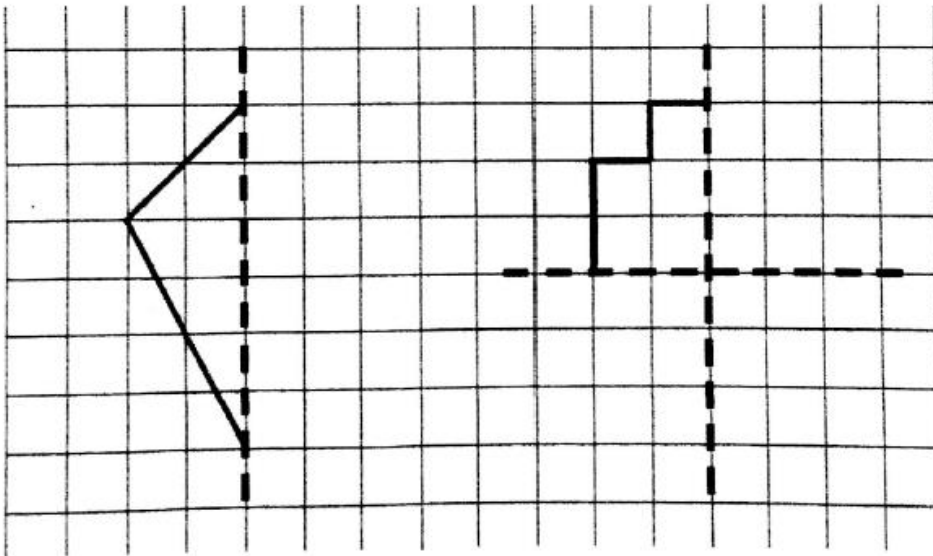
(6 marks)



15) a) Draw **all lines of symmetry** of the following shapes.



b) **Complete** the figures below to make them symmetrical about the dotted lines.



(6 marks)

END OF PAPER