**Levels
5 – 6 – 7**

FORM 2	MATHEMATICS	TIME: 30 minutes
	Non Calculator Paper	

Name: _____   **Class: _____**

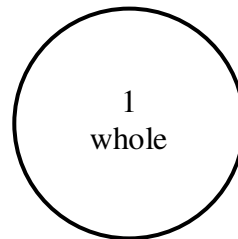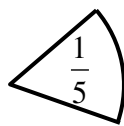| Question	1	2	3	4	5	6	7	8	Total
Mark									

Instructions to Candidates
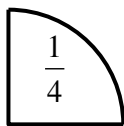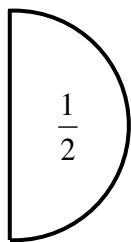
- **Answer ALL questions.**

- **This paper carries a total of 25 marks.**

- **Calculators and protractors are NOT ALLOWED.**

1. a) i) Shade $\frac{1}{4}$ of this diagram.
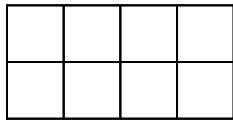
    ii) Fill in the blanks: $\frac{1}{4} = \frac{\boxed{}}{8}$

    b) **True** or **False**? Tick ($\checkmark$) the correct box.

$$\frac{1}{2} + \frac{1}{4} + \frac{1}{5} = 1 \text{ whole}$$ ☐ **True**   ☐ **False**

(3 marks)

2. Fill in the blanks:

    a) $10 = \boxed{} \times 5$

    b) $12 = 4 \times \boxed{}$

    c) $25 = 5 \times \boxed{}$

(3 marks)

3. Work out the following:

    a)   13.1   b)   4.7   c)   13.2   d)   10.26
        + 5.3   − 1.5   − 8.9   + 1.81
        _____   _____   _____   _____

(4 marks)

4. a) Work out the value of *x*.

$x =$ _____ °
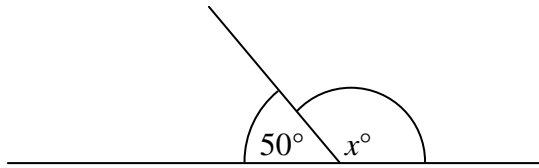
b) Work out the value of *y*.

$y =$ _____ °
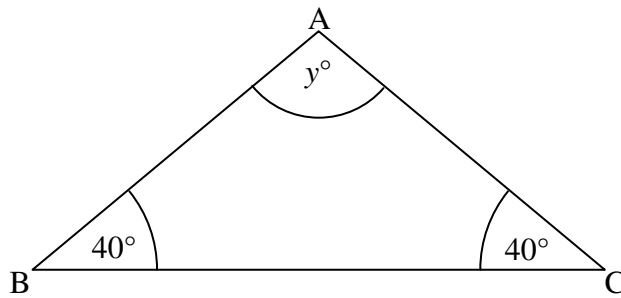
(4 marks)

5.
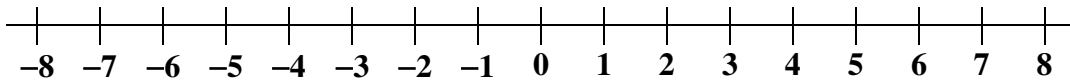
Use the above number line to calculate the following:

a) −3 + 5 = _____

b) −8 + 2 = _____

c) 5 − 7 = _____

d) −3 − 2 = _____

(4 marks)

6. Fill in the blanks: a) $56\% = \dfrac{\boxed{}}{100} = \dfrac{28}{50} = \dfrac{\boxed{}}{\boxed{}}$

b) $\dfrac{2}{7} + \dfrac{3}{7} = \dfrac{\boxed{}}{\boxed{}}$

(3 marks)

7. There are 16 balloons in a packet.

   Jake takes $\frac{1}{4}$ of the balloons.
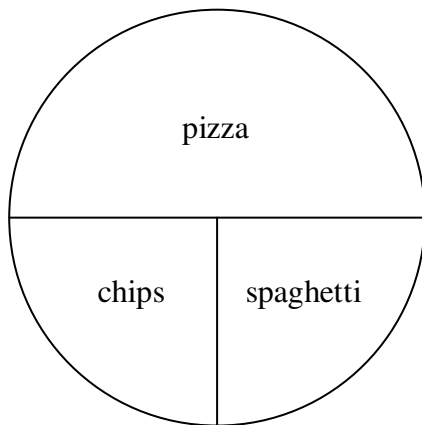
   How many balloons does Jake take?

   _____ balloons

   (2 marks)

8. This pie chart shows the favourite food of a class of students.

   5 students like **chips** best.

   a) How many students like pizza?

   _____ students

   b) How many students are there in the class?

   _____ students

   (2 marks)

END OF PAPER

DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department for Curriculum Management and eLearning
Educational Assessment Unit
Annual Examinations for Secondary Schools 2013

**Levels
5 – 6 – 7**

FORM 2   MATHEMATICS   **TIME: 1h 30min**
Main Paper

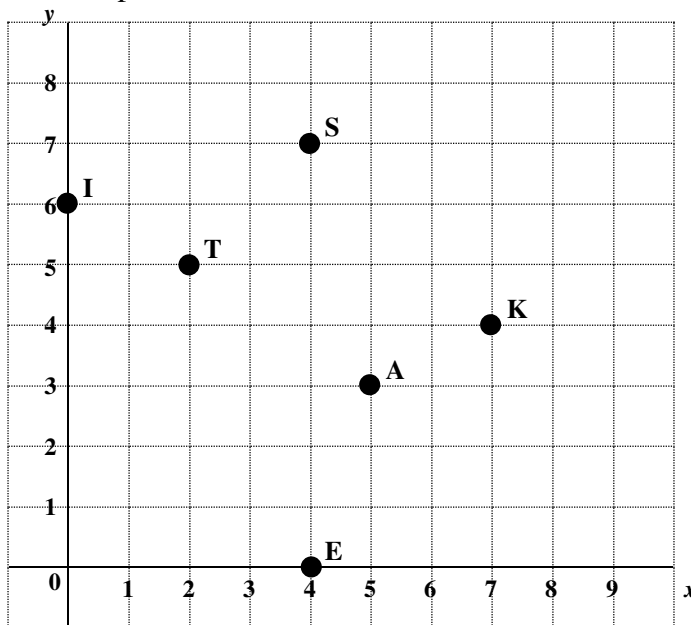| Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total Main	Non Calc	**Global Mark**
Mark																		

DO NOT WRITE ABOVE THIS LINE

Name _____   Class _____

**CALCULATORS ARE ALLOWED BUT ALL NECESSARY WORKING MUST BE SHOWN.
ANSWER ALL QUESTIONS.**

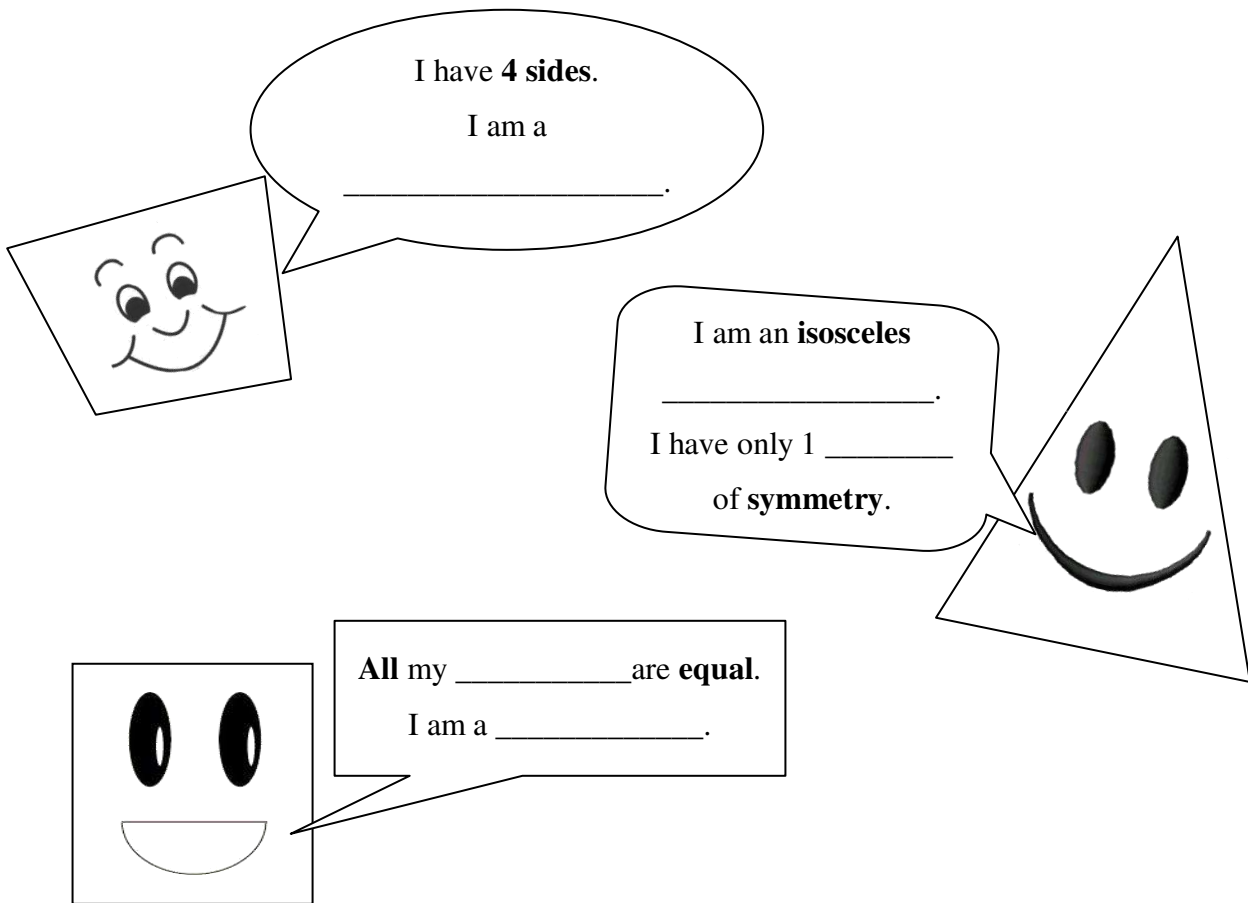1. Write down the letter of the points below, to form a word.

(7, 4)   (0, 6)   (2, 5)   (4, 0)

_____   __I__   _____   _____

(3 marks)

2. a) Fill in the blanks with the following words:

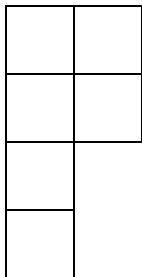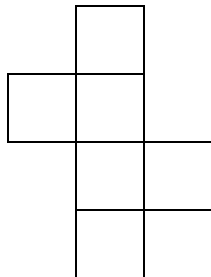| **sides** | **line** | **quadrilateral** | **square** | **triangle** |

I have **4 sides**.

I am a

_____.

I am an **isosceles**

_____.

I have only 1 _____

of **symmetry**.

All my _____ are **equal**.

I am a _____.

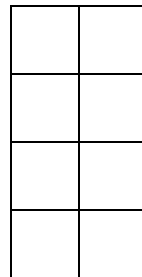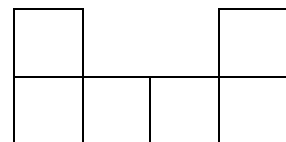b) Which of the following drawings is a net that can be folded into a **cube**?
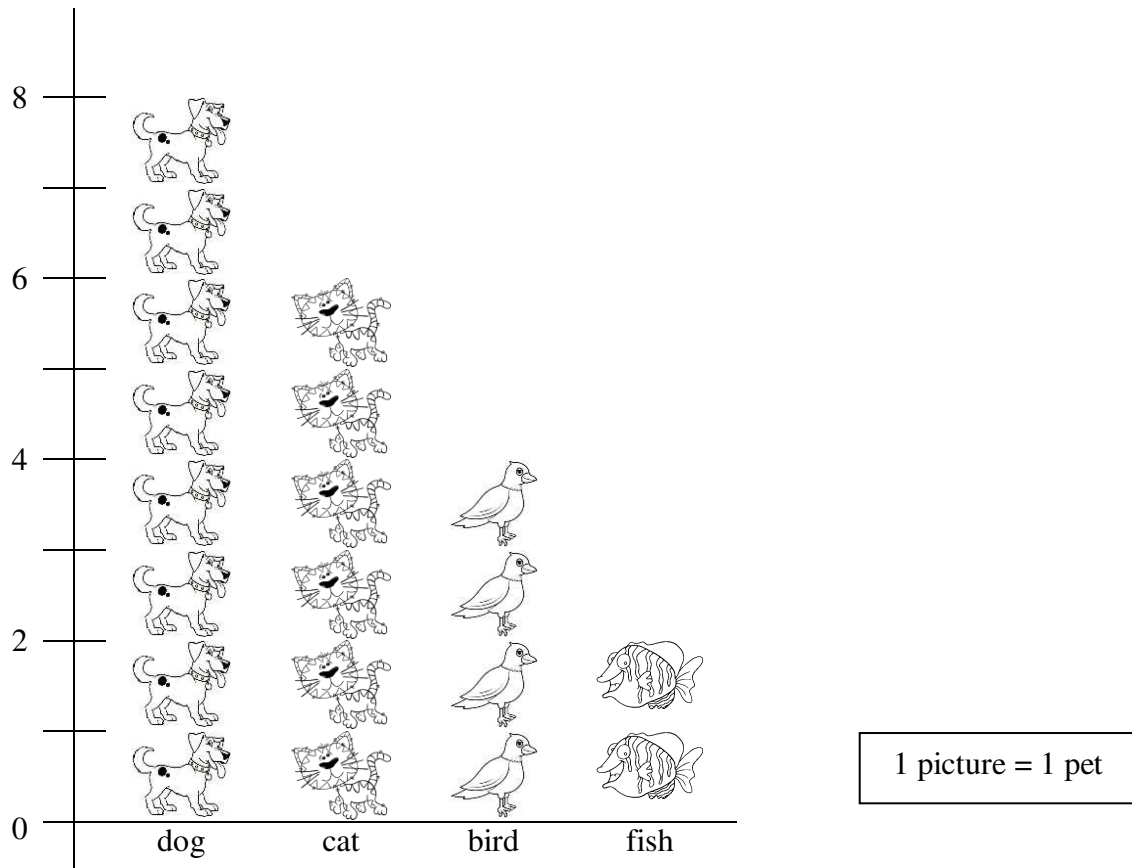
A   B   C   D

(5 marks)

3.   Mandy draws a chart to show all the pets of her friends.

1 picture = 1 pet

a)   Which is the **most favourite** pet?   _____

b)   How many pets do they have **in all**? _____ pets.

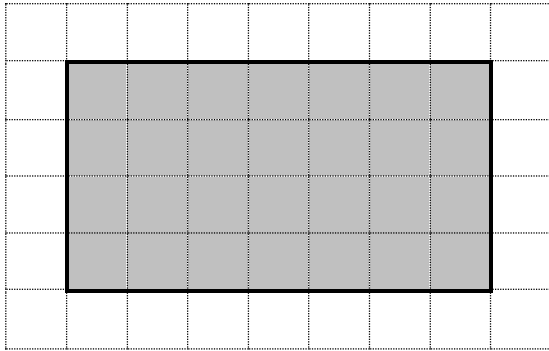c)   Underline the correct word :

The probability that one of Mandy's friends has a **fish** is (unlikely, evens, likely).

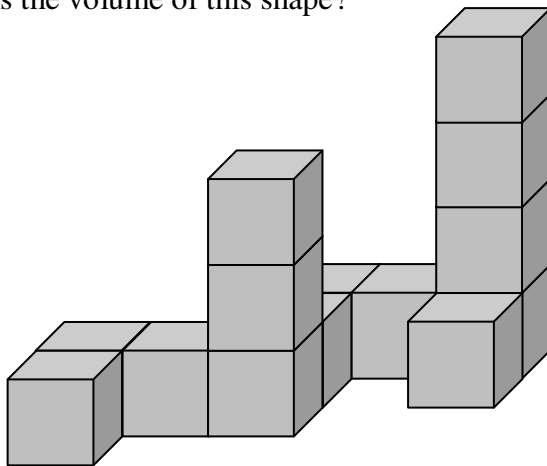d)   Express the number of **birds** as a percentage of the total number of pets.

_____%

(5 marks)

4. a) Find the **area** of the shaded rectangle.
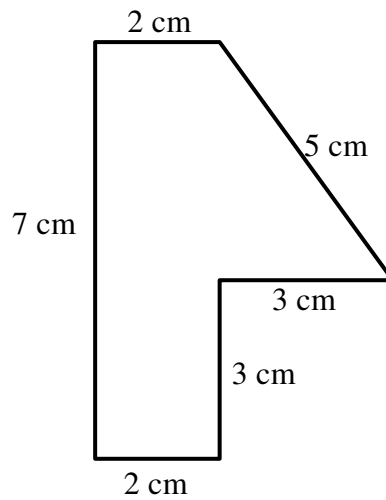
_____ squared units

b) What is the volume of this shape?

_____ cubic units

c) Work out the perimeter of this shape.

2 cm

5 cm

7 cm

3 cm

3 cm
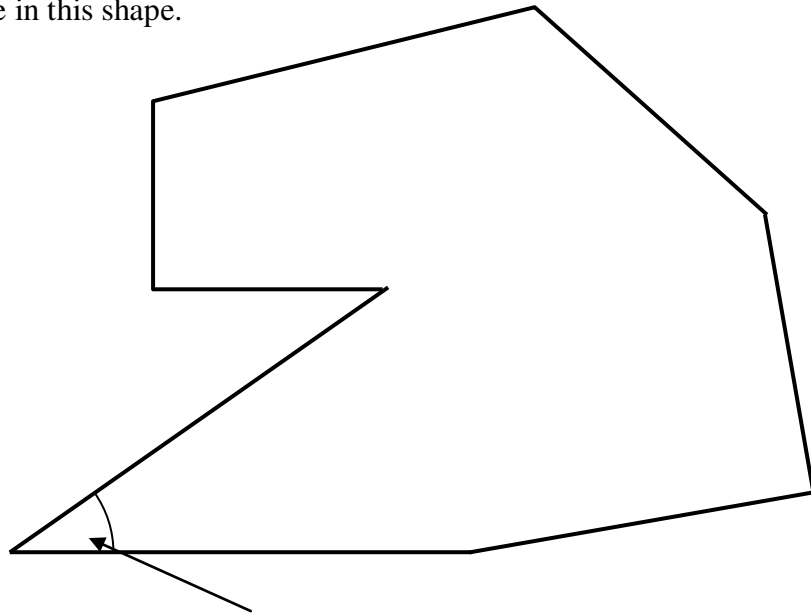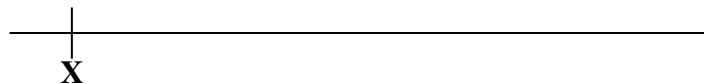
2 cm

_____ cm

(4 marks)

5. a) i) **Mark** a right angle in this shape.

ii) Use your protractor to **measure** this angle.

_____°

b) i) Use your protractor to **draw** an angle of **70°**, at point **X**.
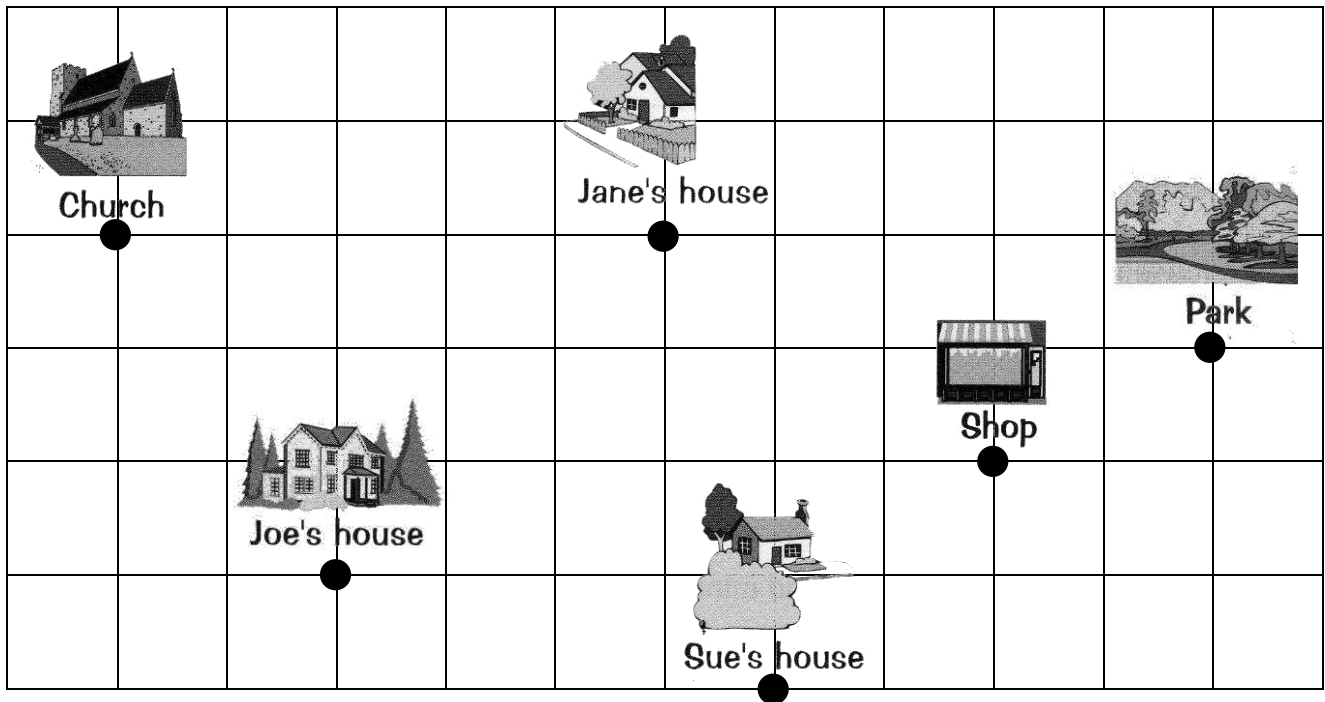
X

ii) **Underline** the correct word:

The above angle is (an acute,   a right,   an obtuse) angle.

(4 marks)

6. a) **Underline** the correct word:

    i. Jane's house is to the (left, right, North) of the church.
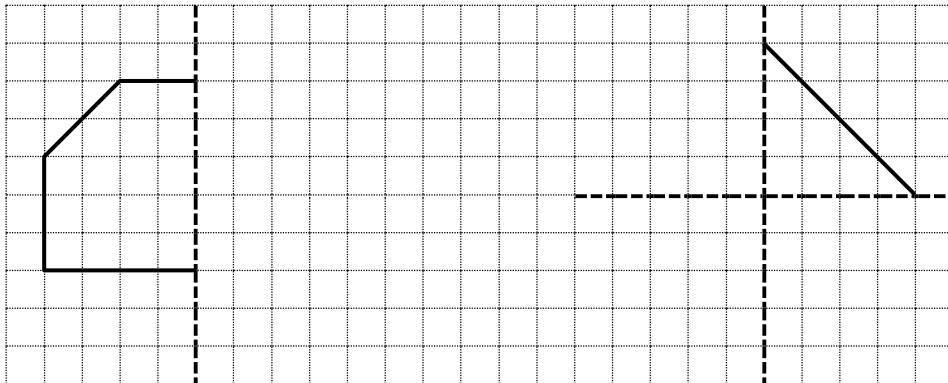
   ii. Sue is at the park.

      To get to her house Sue has to move 4 units (left, up, right) and 3 units down.

  iii. Joe starts from his house and moves 6 units right and 1 unit up.
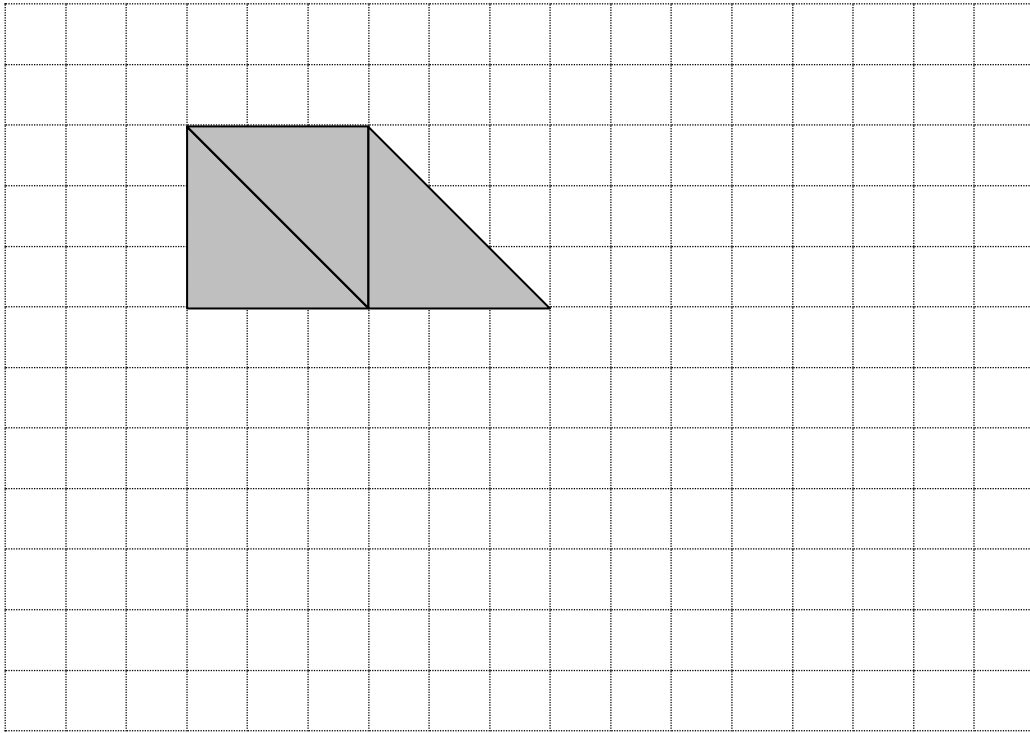
      He arrives at the (church, park, shop).

  b) **Complete** the following shapes, to make them symmetrical about the dotted lines.

(6 marks)

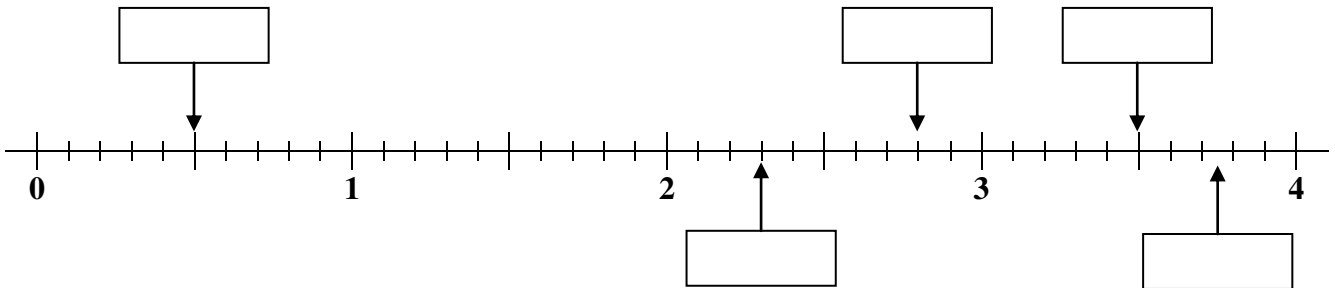7. Continue this tessellation with **4 more** triangles.

(2 marks)

8.

a) Draw a **circle** around a **prime number**.

b) Draw a **triangle** around the **largest square number.**

c) From the above numbers, write down a number that is a **factor of 10**. _____

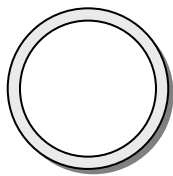d) Which of the above numbers is a **multiple of 10**? _____

(6 marks)

9. a) i) Place the following numbers in the correct boxes on the number line:

3.5   **2.8**   **2.3**   **0.5**   **3.75**

ii) Draw an arrow to show the position of the number **1.55**.

b) Martina is on the 4th floor, in a lift.

She goes **down** 6 floors to the car park.

Fill in the number that she presses.

c) $$x = y + 6$$

What is the value of x when $y = 2$?

$x =$ _____

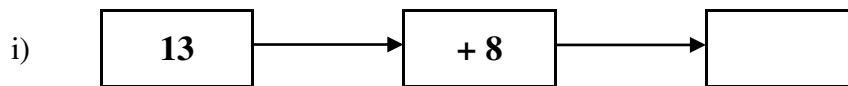(9 marks)

10. a) Fill in the next 2 terms:

i. ⬆ ⬈ ⮕ ⬊ _____ _____

ii. ○ &o 8oo _____ _____

iii. 10, 8, 6, _____, _____

b) Fill in the blanks:

i) | 13 | → | + 8 | → | |

ii) | | → | + 8 | → | 34 |

iii) | 3.2 | → | × 6 | → | |

iv) | 16 | → | ÷ 4 | → | + 5 | → | |
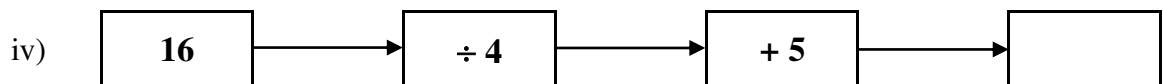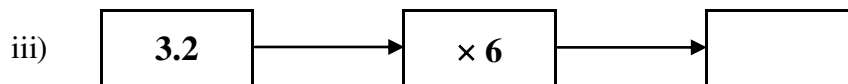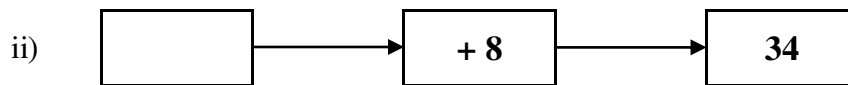
(9 marks)

11. Find the **mean** and **median** of the following marks:

4, 3, 2, 6, 5

Mean = _____

Median = _____

(4 marks)

12. a) Fill in the blanks: $\dfrac{9}{20} = \dfrac{45}{\boxed{}} = \boxed{}\ \%$

b) Eric buys a bicycle.

The bicycle costs **€165**.

The shop offers a **discount of 20%**.

Calculate the discount offered.
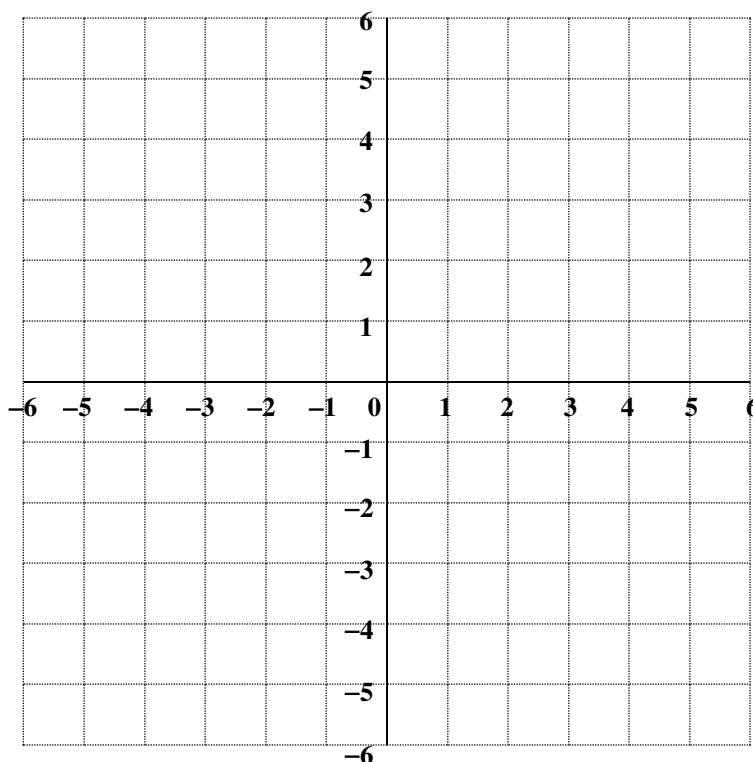
€ _____
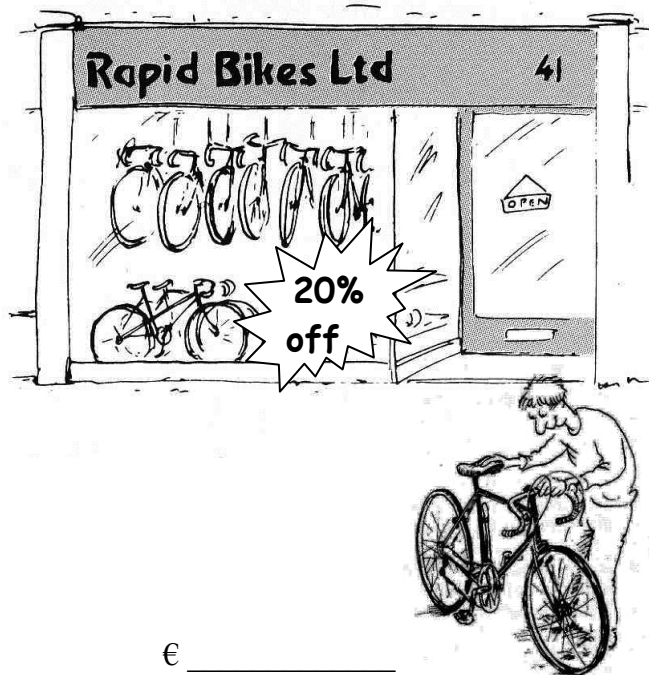
(5 marks)

13. Plot the following points and draw a **straight line**, passing through all the points.
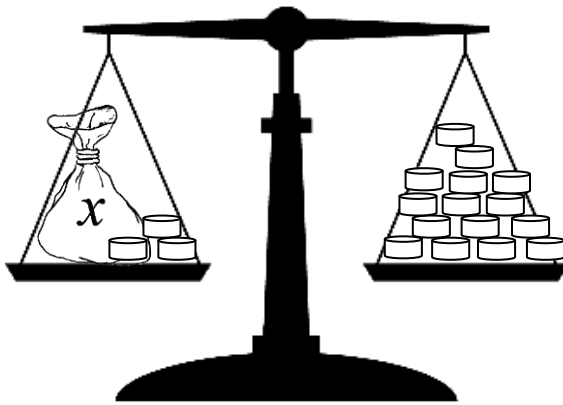
A(1, 1)   **B(0, −1)**   **C(−2, −5)**
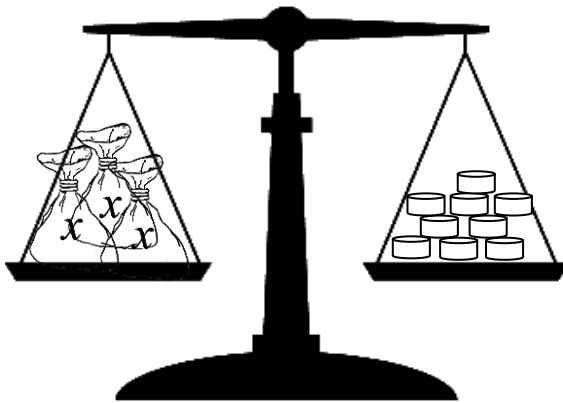
(3 marks)

14. Find x.

a)

$$x + 3 = 15$$

$x =$ _____

b)

$$3x = 9$$

$x =$ _____

(4 marks)

15. Chiara has a recipe for cup cakes for **6 persons**.

Cup Cakes recipe

100g butter
100g sugar
150g flour
2 eggs

a) How many eggs are needed for **12 persons**?

_____eggs

b) Simplify the **ratio of sugar is to flour**.

sugar : flour

100 : 150

_____ : _____

Chiara makes **20 cupcakes**.

She divides them between her brother and sister in the **ratio 3 : 2**.

c) How many cupcakes does she give her **sister**?

_____cup cakes

(6 marks)

END OF PAPER