DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department for Curriculum Management and eLearning
Educational Assessment Unit
Annual Examinations for Secondary Schools 2012

LEV
6 - 7

FORM 1 **MATHEMATICS** **TIME: 30 minutes**
Non Calculator Paper

Question	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Total**
Mark												

DO NOT WRITE ABOVE THIS LINE.

Name: _____ **Class: _____**

Instructions to Candidates

- **Answer all questions.**
- **This paper carries a total of 25 marks.**
- **Calculators and protractors are NOT allowed.**

1. Fill in:

a) 134 + 776 = _____

b) 0.30 × 10 = _____

c) _____ − 22 = 77

d) _____ ÷ 100 = 0.04

(4 marks)

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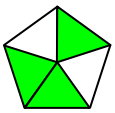
2. **Six** people altogether pay €27 to go to the cinema. How much will **two** people pay?

Ans: €_____

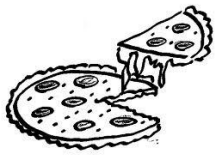
(2 marks)

3.

a)  What fraction is shaded?

Ans: _____

b) Mike divides a pizza in 8 equal parts. He gives Tamsin and Harry 3 parts **each**. What fraction of the pizza is **left** for Mike?



Ans: _____

c) Write the ratio 25 cm **:** 5 m in its simplest form.

Ans: ____:____

(3 marks)

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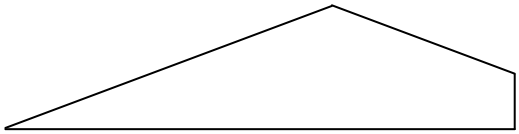
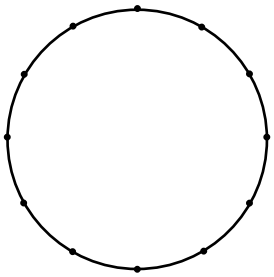
4. Mark the **acute** angle with an arc.



(1 mark)

5. The 12 points on the circumference of the circle are equally spaced. Using a
4 of these points to draw a square.



(1 mark)

6. Angelo buys a 2 litre bottle of water. He pours 200 *ml* in a glass. How much water is **left** in the bottle?

Ans: _____*ml*

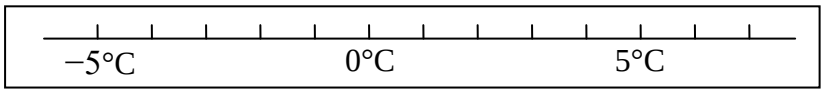
(1 mark)

7. Complete the patterns.

a) €2.26, €2.51, €2.76, €_____, €3.26

b) 1, 2, 4, ____, 16.

c)

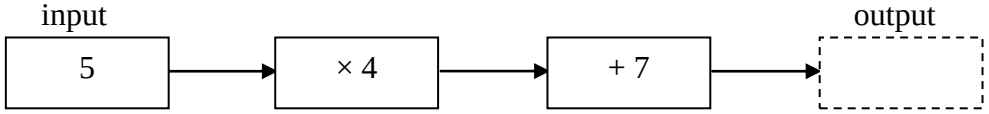


7°C, 5°C, 3°C, 1°C, ____°C.

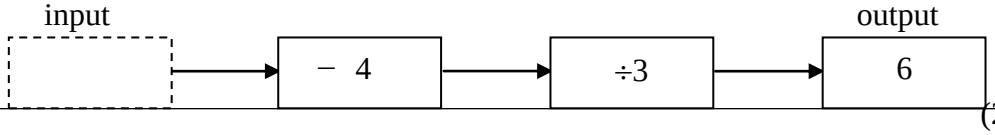
(3 marks)

8. Complete the two number machines.

a)



b)



(2 marks)

9. In a school, 5% of the students are absent, 8% are on an outing and the rest are at school.

a) (i) Express the percentage of **absent** students as a **decimal**.

Ans: _____

(ii) What **percentage** of the students are at school?

Ans:_____%

b) If there are 300 students in all, how many are on an outing?

Ans: _____ students

(3 marks)

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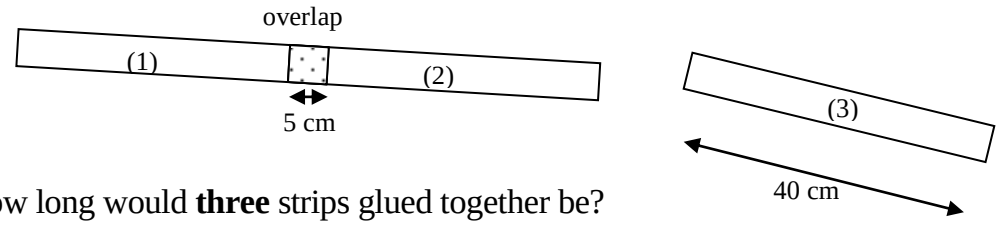
10. Strips of paper are each 40 cm long. They are stuck together with a 5 cm overlap.



How long would **three** strips glued together be?

Ans:_____ cm

(2 marks)

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11. Work out.

a) $\sqrt{64}$ = ____

b) 1^3 = ____

c) 1.5 m + 0.25 m = ____

(3 marks)

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LE
6 -

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

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	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. a) Write five thousand and seventy six in **figures**. _____

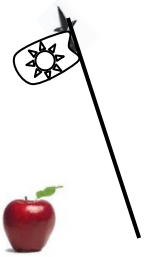
b) Express 100 000 as a power of ten. _____

c) Work out:

4800 ÷ 40 _____

(3 marks)

2. a) Which is the best estimate for the **length** of a flag mast?



7 mm, 77 cm, 7 m, 1 km _____

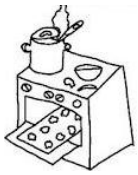
b) Which is the best estimate for the **weight** of an apple?

15 g, 1 kg, 150 g, 5 mg _____

c) Which is the best estimate for the **capacity** of a can of paint?

2 litres, 2 millilitres, 20 ml, 1 m^3 _____

d) Which is the best estimate for the **temperature** in a **hot** oven?



−300°C, 20°C, 120°C, 300°C _____

(4 marks)

3. Look at this quadrilateral.

Tick (✓) the **correct** statements.

a)	It is a rectangle.	✓
b)	It has line symmetry.	
c)	It is a regular polygon.	
d)	Its sides are all equal.	
e)	Its diagonals are equal.	

(2 marks)

4. Put these in order from **largest** to smallest.

a)

1 hour 10 minutes	25 minutes	$1\frac{1}{4}$ hours	$\frac{1}{2}$ hour

_____ _____ _____ _____

b)

6.25 m	269 mm	32 cm	2.7 km

_____ _____ _____ _____

c)

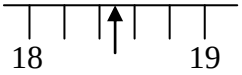
467 g	1.210 kg	0.5 kg	0.055 kg

_____ _____ _____ _____

(6 marks)

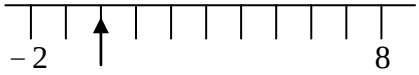
5. Estimate the number the arrow is pointing to.

a)



_____

b)



_____

(2 marks)

Name: _____ **Class:** _____ **LEVELS**

6. The following table shows the amount of pocket money 10 boys get per week.

€2.50	€4.00	€2.50	€3.50	€10.00
€5.00	€3.00	€3.50	€2.50	€7.00

a) Find the **median** of the data.

median is_____

b) Work out the **mean**.

mean is_____

c) What is the **mode**?

mode is_____

(4 marks)

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7. a) This is an ordinary six sided dice.

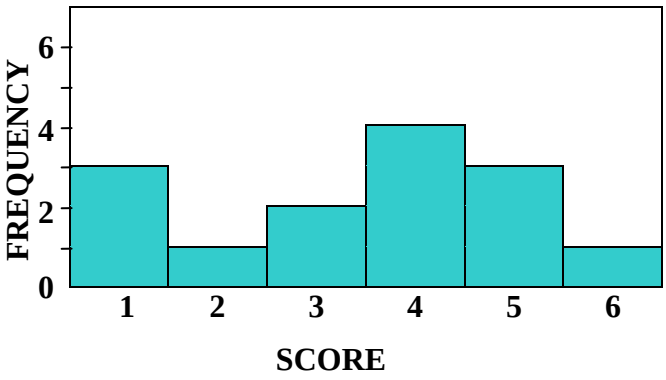
(i) What is the probability of getting a four? _____

(ii) What is the probability of getting a **multiple** of 3? _____

(iii) Which are the three **prime** numbers on the dice? ___, ___, ___

(iv) Which is the **larger square** number on the dice? _____

b) The bar chart indicates the numbers that were shown when Matthew th
dice 14 times.
Use the information in the chart to fill in the frequency table.



Score	Frequency
1 – 2	
3 – 4	
5 – 6	
Total	14

(9 marks)

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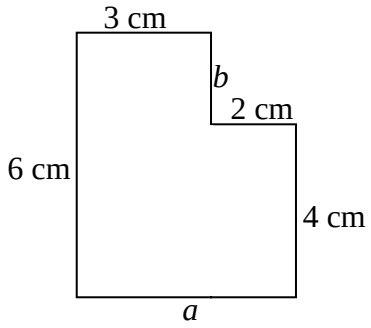
8. a) The shape has perpendicular sides.



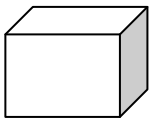
(i) Fill in the spaces:

a = _____ cm , b = _____ cm

(ii) Work out the **perimeter** of the shape in centimetres.

_____ cm

b) A box is 15 cm long, 12 cm wide and 10 cm high.



(i) Find the area of **one** of the **largest** faces.

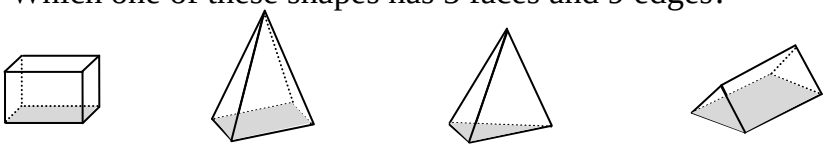
_____ cm^2

(ii) Find the volume of the box.

_____ cm^3

Name: _____ **Class:** _____ **LS**

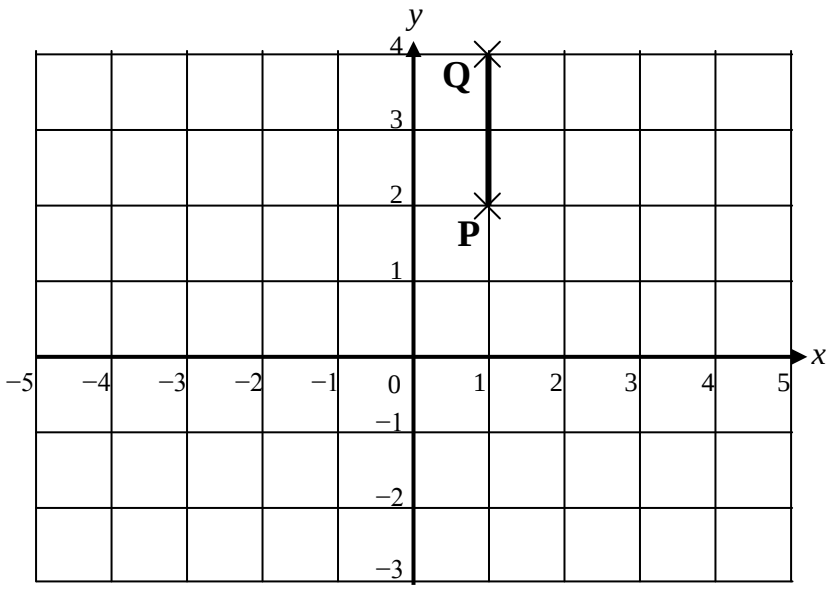
c) Which one of these shapes has 5 faces and 9 edges?



(*p*) (*q*) (*r*) (*s*) _____

(8 marks)

9.



a) (i) Write the coordinates of points P = (,) and Q = (,).

(ii) Plot and label point R = (3, 4).

(iii) Plot and label point S so that PQRS is a square. Join PQRS.

(iv) **Reflect** the square PQRS in the ***y* axis**. Label it P′Q′R′S′.

(v) **Translate** the square PQRS **5 left** and **3 down**. Label it P″Q″R″ S″.

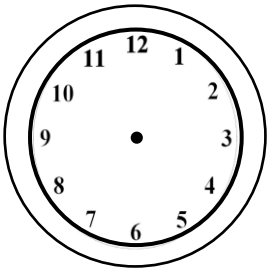
b) (i) Write the coordinates of 1 more point which lies on the same **line** as the following points. (1, −3) (2, −3) (3, −3) (4, −3) (,)

(ii) Which is the equation of this **line**?

$y = -3$ $y = 3$ $x = -3$ $y = x - 3$ _____

(10 marks)

10.



Angela's last birthday party started at **half past five**.

a) Show this time on the clock face.

b) Write the time using 24-hour clock. _____

c) The party finished at 9:00 pm. How long was the party?

____ h ____ min

(4 marks)

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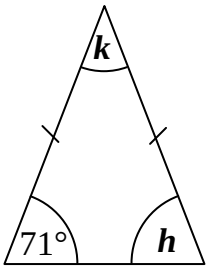
11. a) If $x = 4$ and $y = 10$ find the value of : $2(x + y)$

_____

b)



(i) Complete the statement:

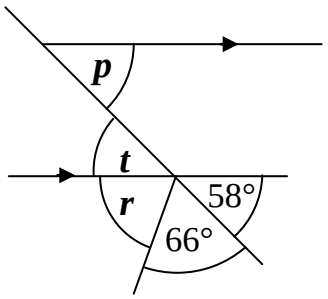
This triangle is called isosceles because

_____

(ii) Work out the values of ***h*** and ***k*** in the triangle.

h = ____°

k = ____°

c) 

Complete the following.

(i) $t = 58°$ (*reason*:_____)

(ii) p = ____ (t or r) (*reason*: alternate angles)

(iii) r = ____° (*reason*:_____)

(10 marks)

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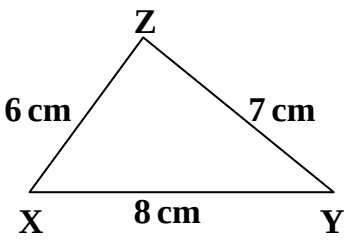
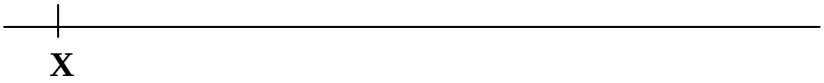
12. a) Using ruler and compasses only, make an accurate labelled drawing of the triangle shown, starting from the given line below.





b) Measure angle X correct to the nearest degree. Angle X = _____°

c) (i) Mark point M which is on line XY and 5 cm **from point Y**.

(ii) Draw line ZM and measure ZM to the **nearest mm**.

ZM = _____

(6 marks)

13. a) What is the value of x in the equation $3x + 1 = 10$?

$x =$ _____

b) Underline the two equations which have the value of $y = 4$.

$2y - 1 = 7$ $\quad$ $4 + y = 8$ $\quad$ $6y + 2y - 20 = 8$ $\quad$ $4y + 4 = 8$

(4 marks)

14.

(Turtle is shown in start position.)

James entered the following commands in LOGO:

PD FD 50 _____

Write the commands necessary to complete the capital letter T.

(3 marks)