| **FORM 1** | **MATHEMATICS (Mental)** | **TIME : 10 minutes** |

Name : _____   **Class :** _____

Mark

- **ANSWER ALL QUESTIONS.**

- **EACH QUESTION CARRIES 1 MARK.**

- **CALCULATORS, RULERS, PROTRACTORS AND OTHER MATHEMATICAL INSTRUMENTS ARE NOT ALLOWED.**

- **ON YOUR DESK YOU SHOULD HAVE NOTHING EXCEPT FOR PEN, PENCIL AND EXAMINATION PAPER.**

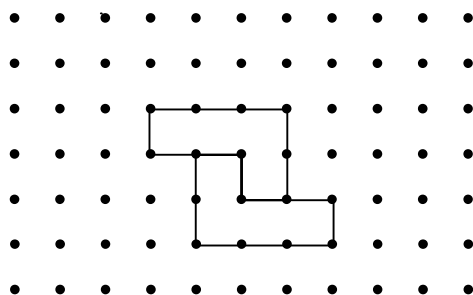- **WRITE DOWN YOUR ANSWER ONLY IN THE SPACE PROVIDED.**

DO NOT WRITE IN THIS SPACE

QUESTIONS	Space for working if required
1. What is the value of 4 in 2143 ? Ans:_____	
2. 1·6 metres = _____ cm.	
3. The length of this nail is about: (a) 1 cm (b) 3 cm (c) 10 cm (d) 10 mm Ans: _____	
4. Give a rough estimate of : $$38 \times 11$$ Ans: _____	
5. Find 25% of 20. Ans: _____	

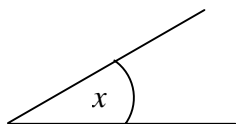6.   Give   275   to the nearest 100.

Ans:_____

7.   John lays tiles in a room. The first two tiles look like this.
      Continue this pattern with another tile.

8.   Make equivalent fractions:

$$\frac{3}{9} = \frac{\Box}{3}$$

9.

The size of angle x is about:
(a) 10º   (b) 30º   (c) 90º   (d) 120º

Ans:_____

10.

N

John faces East. He turns through ½ of a revolution.

In which direction will he be facing?

Ans:_____

END OF PAPER

SECONDARY SCHOOL ANNUAL EXAMINATIONS 2005
Educational Assessment Unit –Education Division

																Total Main	Mental	Global
FORM 1					**MATHEMATICS (Main Paper)**							**Time : 1h 50min**						

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

DO NOT WRITE ABOVE THIS LINE

Name : _____   Class : _____

CALCULATORS ARE NOT ALLOWED

ANSWER ALL QUESTIONS.

1.   From the following set of numbers

2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

write down
(i)   two even numbers: _____ , _____ .

(ii)   two factors of 10 :   _____ , _____ .

(4 marks)

2.   (a)   Write in figures:

One thousand, two hundred and twelve.   _____ .

(b)   Write these numbers in order of size, starting with the smallest:

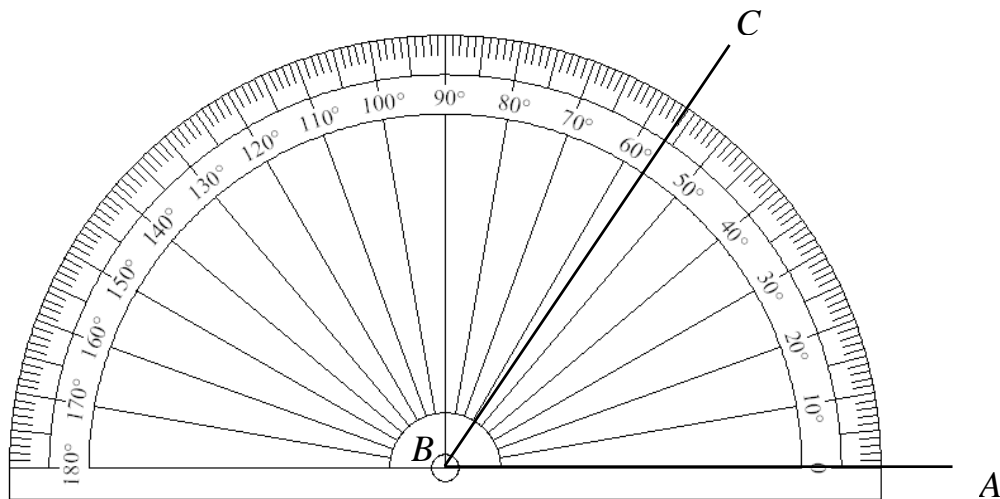### 12, 1·25, 10·2.   _____

(4 marks)

3. I have 25 oranges that I pack in bags of 4 each.

    (i)   How many bags do I fill?

    _____

    (ii)   How many oranges have I left over?

    _____
                                                                            (4 marks)

4.

    (i)   What is the size of angle *ABC* in the diagram?   _____

    (ii)   On this same protractor, draw a right angle and label it *ABD*.

    (iii) On this same protractor, draw an angle of 135° and label it *ABE*.

    (iv)   Is an angle of 135° obtuse, acute or reflex?   _____
                                                                            (4 marks)

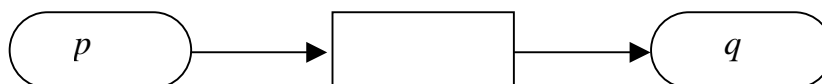5. A taxi charges Lm1 per kilometre and Lm2 for the luggage.
    (i)   In this table,

    p is the number of kilometres

p	1	2	3	4	5	6
q	3	4	5			

    q is the fee charged

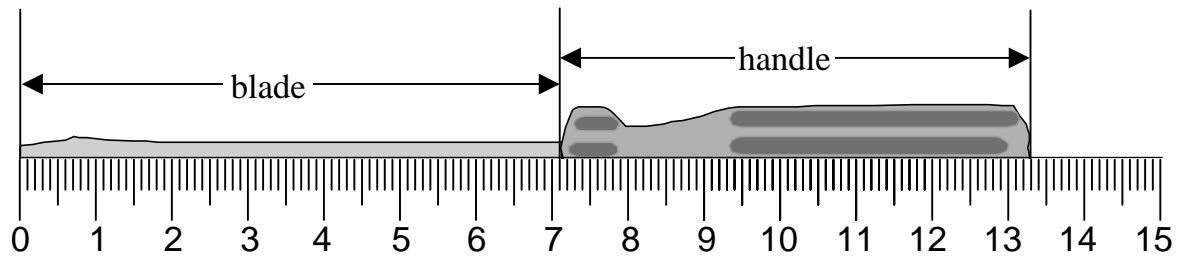   Complete the table.

    (ii)   Complete the following function machine:

                                                                            (4 marks)
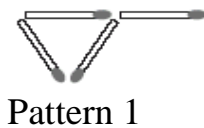
6.   Here is a picture of a screw-driver.

Using the scale shown

(i)   what is its total length in cm?   _____ cm.

(ii)   what is its total length in mm?   _____ mm.

(iii)   what is the length of the blade?   _____ cm.

(iv)   what is the length of the handle?   _____ cm.

(v)   Express the length of the handle to the nearest cm.   _____ cm.

(6 marks)

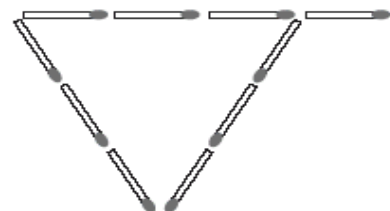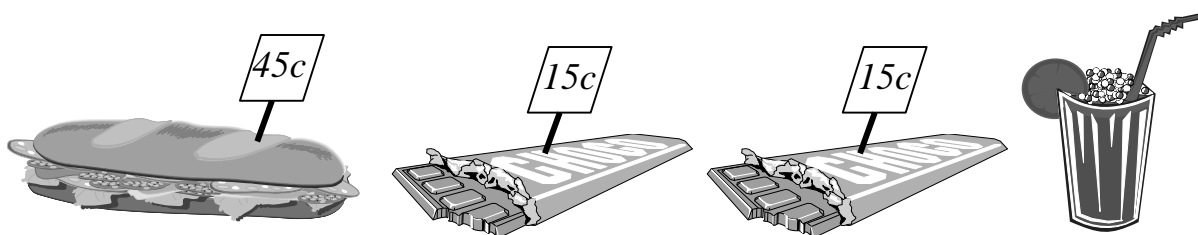7.   The following patterns are made from matchsticks:

Pattern 1

Pattern 2

Pattern 3

(i)   How many matches are there in each pattern?

Pattern 1:_____   Pattern 2:_____   Pattern 3:_____

(ii)   How many matches are needed for Pattern 4 ?   _____

(iii)   Draw Pattern 4.

(6 marks)

8.   A roll costs 45 cents and a bar of chocolate costs 15 cents. John buys a roll, 2 bars of chocolate and a lemonade.
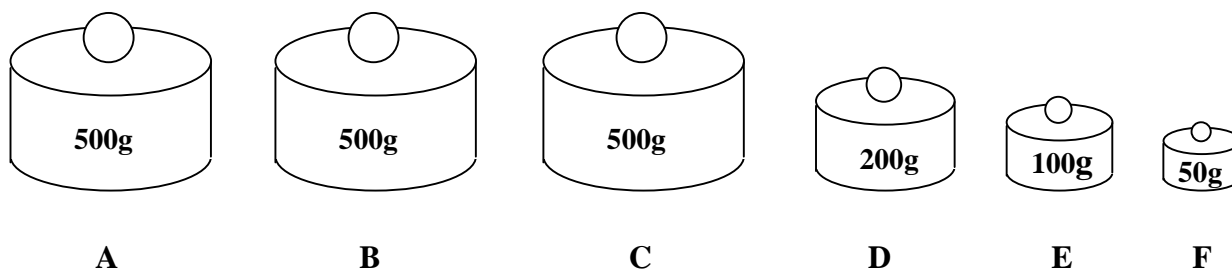
45c   15c   15c

(i)   He gets 85 cents change from Lm2. How much does he spend in all?

_____

(ii)   Work out the total cost of two bars of chocolate and a roll.

_____

(iii)   Find the cost of the lemonade.

_____

(6 marks)

9.

500g   500g   500g   200g   100g   50g

A   B   C   D   E   F

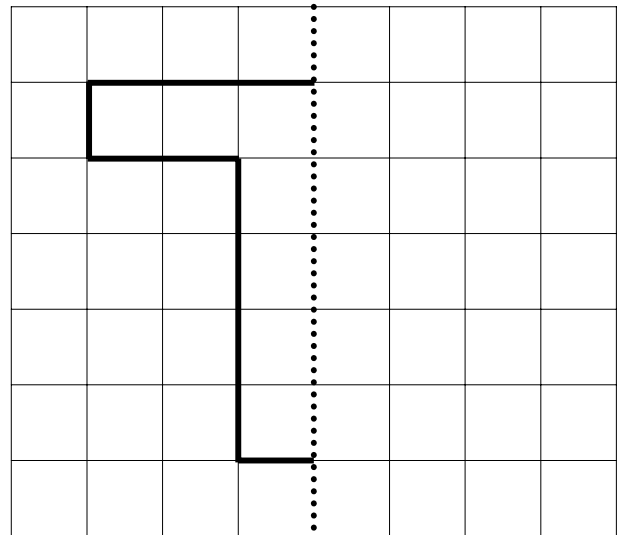(i)   Name one weight that is exactly ½ kg.   _____

(ii)   Which weight is exactly four times that of **F**?

_____

(iii)   What is the total weight in grams?

_____

(iv)   Express this total weight in kilograms.

_____

(6 marks)

10. (a) (i) Complete the shape so that the broken line is its line of symmetry.

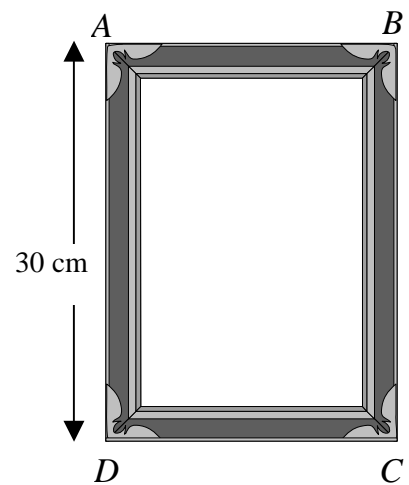(ii) The area of each square is 1 cm². What is the area of the **whole** shape?

_____ cm²

(b) The perimeter of this frame is 100 cm.

(i) What is the length of *BC* ?

_____cm

(ii) Work out the length of *AB*.

30 cm

_____cm

(6 marks)
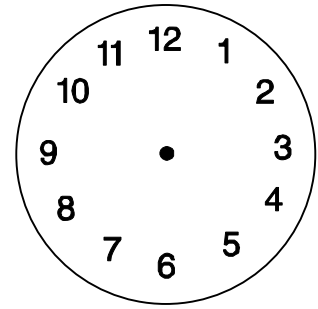
11. (a) What fraction of the figure is shaded?

_____

(b) There are 20 pencils in a box. $\frac{2}{5}$ of these are red. How many are **not** red?

_____

(c) Work out and simpify: $\frac{3}{5} + \frac{4}{5} =$

_____

(d) Mary sleeps for 8 hours. For what fraction of the day is she asleep?

_____

(8 marks)

12. (a) A bus leaves Valletta at 13:50.
       Mark this time on the 12-hour clock.

    (b) Fill in correctly:
        120 minutes = _____ hours.

        2½ minutes = _____ seconds.

    (c) (i) What day of the week is the
            last day of January 2009?

            _____

       (ii) What is the date of the third
            Thursday in February?

            _____

      (iii) February 10th is a holiday.
            What day of the week is it?

            _____

       (iv) Is 2009 a leap year?   _____

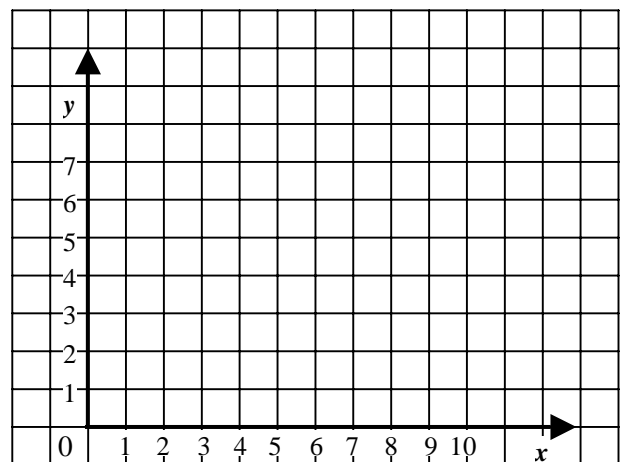| FEBRUARY 2009						
MON	**TUE**	**WED**	**THU**	**FRI**	**SAT**	**SUN**
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

(8 marks)

13. (a) On the grid shown
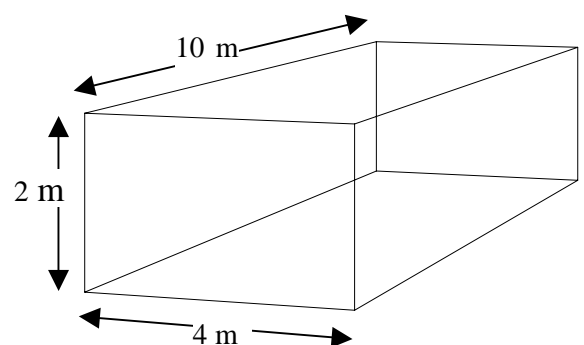   (i)   mark the points
        A(1, 1), B(1, 6), C(6, 6),   D(6, 1).

       (ii)   join the points in alphabetical order.

      (iii) name the shape you obtain.

            _____

   (b) An aquarium at the zoo is 10 m long, 4 m wide and
       2m high. What volume of water can it hold?

            _____

(8 marks)
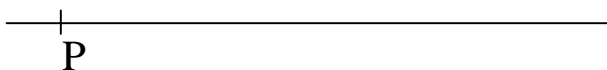
14. (a) Liz types the following LOGO commands:

PD REPEAT 2[FD 50 LT 90 FD 80 LT 90]

Sketch the figure she gets.

(b) (i) On the line shown draw PQ = 6 cm.

(ii) Using ruler and compasses only, draw a triangle PQR with PQ = 6 cm, PR = 5 cm and QR = 5 cm.

P

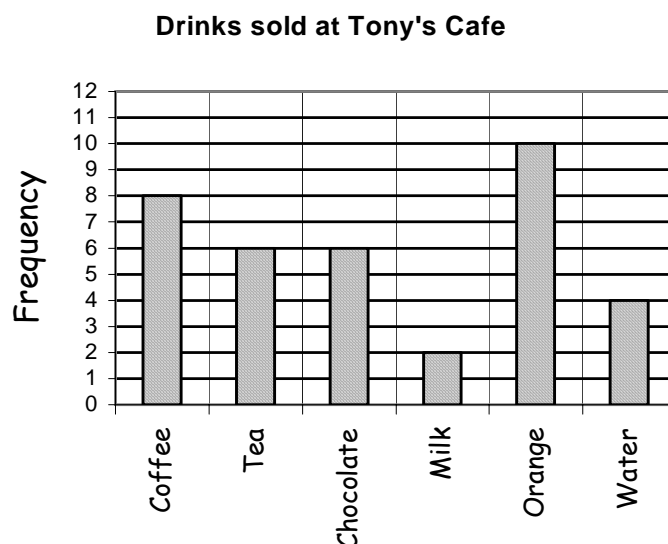(iii) Is this triangle scalene, isosceles, or equilateral? _____

(8 marks)

15. (a)   This bar chart shows the number of drinks sold in one hour at TONY'S CAFE.
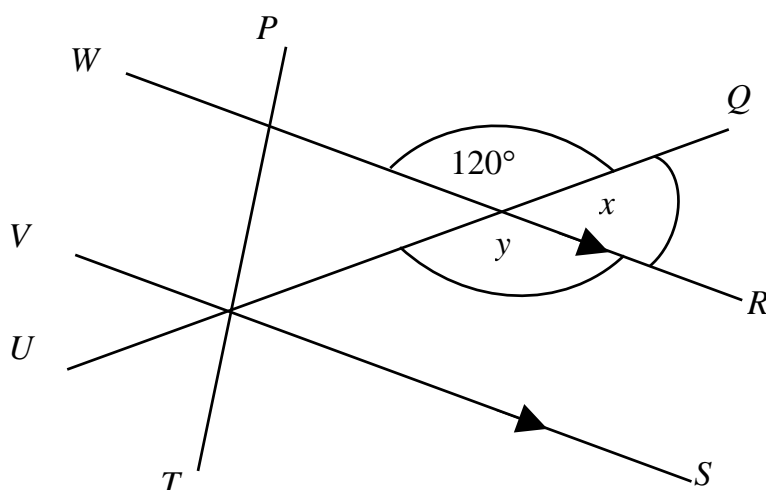
Drinks sold at Tony's Cafe

(i)   Which drink was the most popular?

_____

(ii)   How many drinks were sold in all?

_____

(iii) Which two drinks sold equally?

_____

(b)

(i)   What is the size of angle *x* ?   _____

(ii)   What is the size of angle *y* ?   _____

(iii) Name two parallel lines.   _____

(8 marks)

END OF PAPER