SECONDARY SCHOOL ANNUAL EXAMINATIONS 2008
DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Educational Assessment Unit

B

FORM 1 **MATHEMATICS – SCHEME B** **TIME: 45 minutes**
(Non-Calculator Paper)

1	2	3	4	5	6	7	8	9	10	TOTAL MARK

DO NOT WRITE ABOVE THIS LINE

Name: _____ **Class: _____**

INSTRUCTIONS TO CANDIDATES

- **Answer all questions.**

- **This paper carries 40 marks.**

- **Calculators and protractors are not allowed.**

1. Work out:

a)
$$23.57$$
$$+ 1.24$$
———————

———————

b) 13.94
$- 6.45$
———————

———————

c) $19.28 \times 10 =$ _____

d) $\dfrac{38.85}{100} =$ _____

_____(4 marks)

2. Calculate the marked angles shown below:

a)

$p =$ _____ $^\circ$

b)

$q =$ _____ $^\circ$

c)

$r =$ _____ $^\circ$
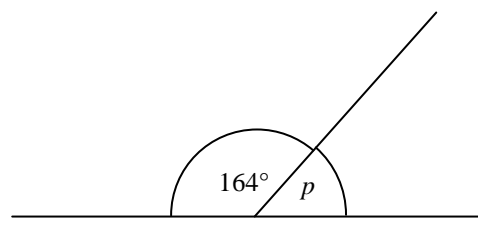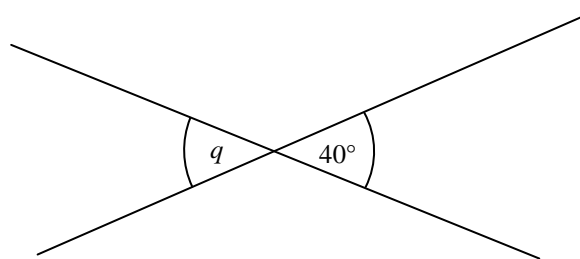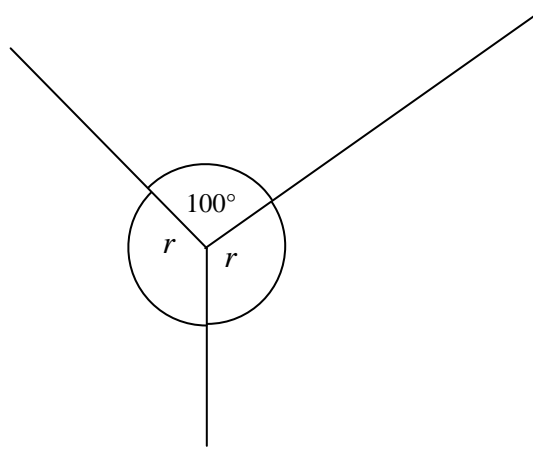
_____ (4 marks)
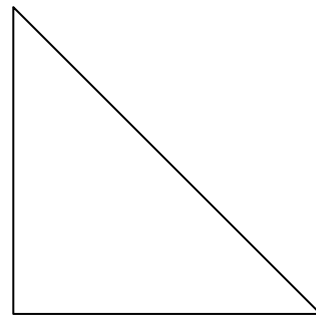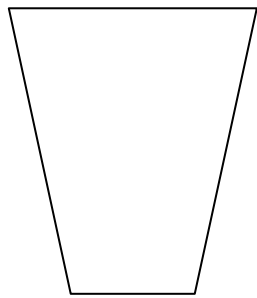
Name : _____   Class : _____   **B**
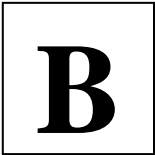
3.   Simplify: a) $p + p + p$ =   _____

b) $4c + 3c$ =   _____

c) $5x - 3x$ =   _____
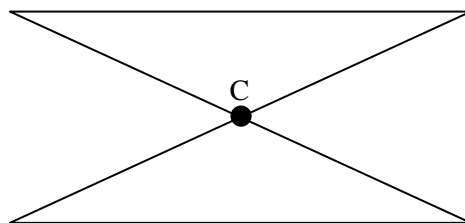
d) $y + 6 - 2$ =   _____

_____(4 marks)

4. a) Draw the line of symmetry of each of these shapes:

b) Write 3 capital letters which have at least one line of symmetry. (An example has been done for you.)

$\underline{A}$,   _____ ,   _____ ,   _____

c) What is the order of rotational symmetry, about C, of the given shape?

C

Ans_____

_____ (6 marks)

5. a) How many minutes pass when the minute hand makes:

    i)   a quarter turn ?   Ans_____

    ii) 2 full turns?   Ans_____

  b) It takes me 35 minutes to walk from home to school. School starts
     at 8.15a.m. At what time must I leave home so that I arrive at school on time?

                                  Ans_____

_____(4 marks)

6. Find the value of:
  a) $3b$ when $b = 5$,

                                  Ans_____

  b) $t - 2$ when $t = 10$,

                                  Ans_____

  c) ab when $a = -3$ and $b = 8$,

                                  Ans_____

  d) x^2 when $x = 3$.

                                  Ans_____

_____(4 marks)

7. a) (i) Round 269 to the nearest 100.   Ans _____

    (ii) Round 483 to the nearest 10.   Ans _____
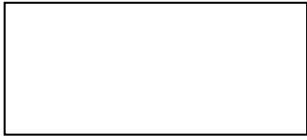
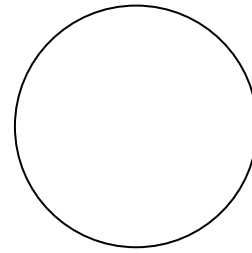 b) (i) How many centimetres are there in 2 m?   Ans _____

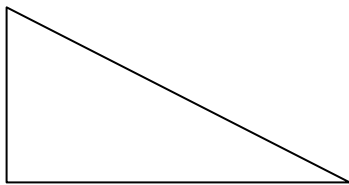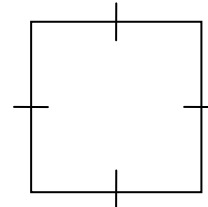   (ii) How many metres are there in 550 cm?   Ans _____

_____(4 marks)

8. Write down the name of each of the following figures:

_____   _____

_____   _____

_____ (4 marks)

9. Mr Gatt has a sack of potatoes. This weighs 150 kg.
   He packs the potatoes into 5-kilogram bags.
   a) How many bags does he fill?

                                                    Ans a) _____
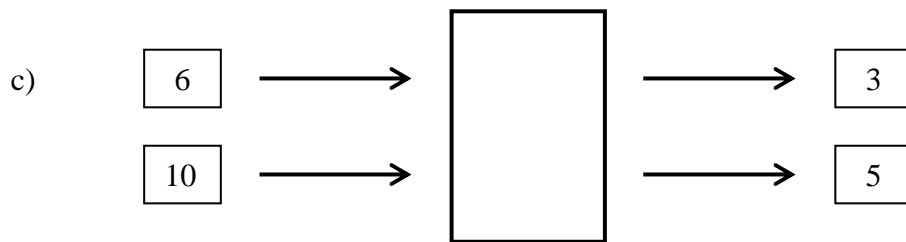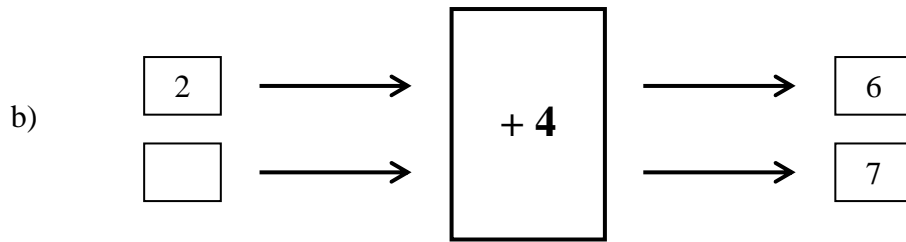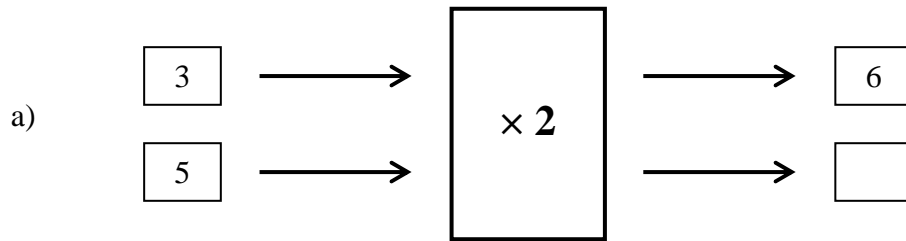
   b) He sells all the bags for €1.50 each. How much money does he get?

                                                    Ans b)_____

_____(3 marks)

10. Complete the number machines below:

a)

| 3 | → | × **2** | → | 6 |

| 5 | → | | → | [ ] |

b)

| 2 | → | **+ 4** | → | 6 |

| [ ] | → | | → | 7 |

c)

| 6 | → | [ ] | → | 3 |

| 10 | → | | → | 5 |

(3 marks)

END OF PAPER

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B

| **FORM 1** | | | | | **MATHEMATICS – SCHEME B** | | | | | | | | **TIME: 1h 15min** | |
(Main Paper)

1	2	3	4	5	6	7	8	9	10	11	12	Total Main	Non Calculator	GLOBAL MARK

DO NOT WRITE ABOVE THIS LINE

Name: _____   Class: _____

INSTRUCTIONS TO CANDIDATES

- **Answer all questions.**

- **This paper carries 60 marks.**

- **Calculators and mathematical instruments are allowed.**

_____

1. a) I share 4 apples equally among 3 children. How much will each child get?

Ans_____

b) Calculate i) $\frac{1}{3}$ of 15.75 kg

Ans_____

ii) $\frac{3}{4}$ of €100

Ans_____

c) Work out:

i) $\frac{2}{5} + \frac{1}{5}$

Ans_____

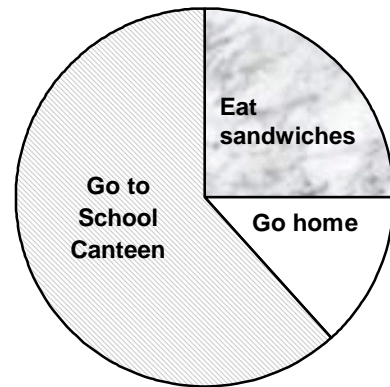ii) $\frac{2}{3} \times \frac{3}{7}$

Ans_____

_____ (5 marks)

2. This pie chart shows how the students of a class have lunch during mid-day break.
   a) Write down the largest slice of the pie chart.

   Ans_____

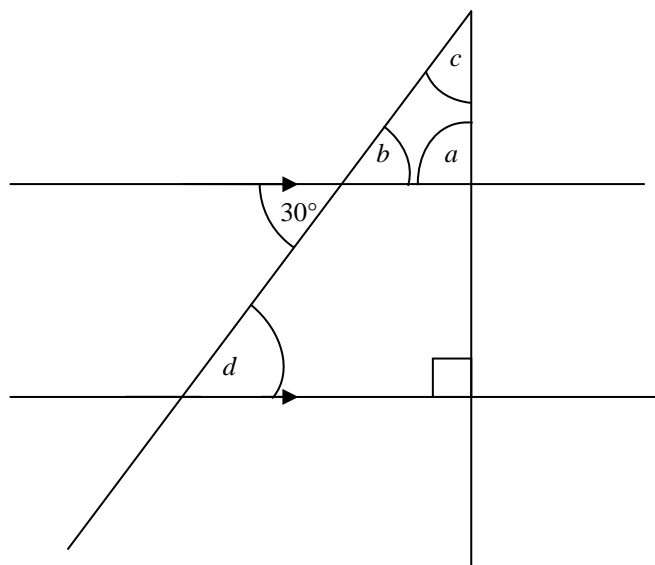   b) Write down the fraction of the class that has sandwiches.

   Ans_____

   c) Eight pupils in the class have sandwiches. Write down the number of pupils in the class.

   Ans_____

_____ (4 marks)

3. Find the value of the angles marked with the letters. Give a reason for each answer.

a = _____ °   Reason_____

b = _____ °   Reason_____
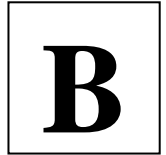
c = _____ °   Reason_____

d = _____ °   Reason_____

_____ (8 marks)

Name : _____   Class : _____

4. Write down i) a factor of 15.   Ans _____

              ii) a multiple of 4 less than 20.   Ans _____

            iii) a prime number greater than 10.   Ans _____

            iv) the square root of 25.   Ans _____

            v) the value of the digit **3** in the number **2379**.   Ans _____

_____ (5 marks)

5. a) Use your compasses to draw a circle of radius 4 cm.

   b) Label the centre of the circle, O.

   c) In your circle draw   i)   a radius. Label this radius, OA.
                      ii)   a diameter. Label this diameter BOC.

   d) What is the length of the diameter BOC?   Ans _____

_____ (5 marks)

6. A pencil case contains 15 pencils. There are 6 black pencils, 6 blue, 2 red and 1 green. One
   pencil is removed at random.
   Calculate the probability that the pencil removed is:

   a) black   Ans_____
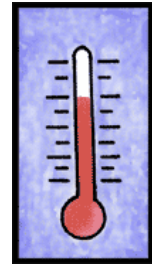
   b) green or red   Ans_____

   c) yellow   Ans_____

_____ (3 marks)

7. a) Write down the temperatures in order of size, coldest first:

   − 1 ℃,   7 ℃,   − 4 ℃,   10 ℃,   − 2 ℃

   _____   _____   _____   _____   _____
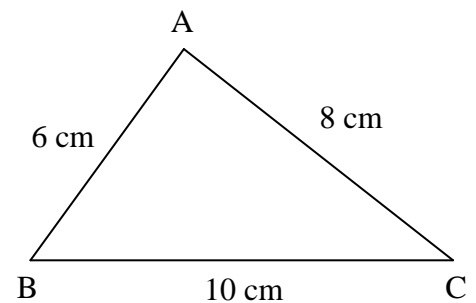
   b) One day, the temperature in Finland was 6 ℃. That night the temperature measured − 8 ℃. What was the difference between the day and night temperatures?

                                                    Ans_____
_____ (5 marks)

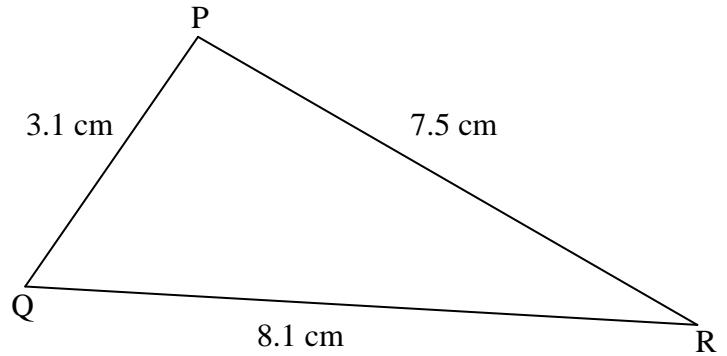8. a) Use a pair of compasses and a ruler to construct the triangle ABC shown below.
   b) Use your protractor to measure angle A.

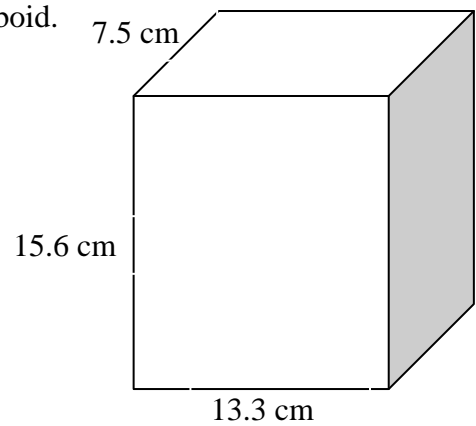   A

                                            6 cm   8 cm

                                        B   10 cm   C

                                                    Ans b) _____

_____ (6 marks)

9. a) Calculate the perimeter of triangle PQR.

P

3.1 cm

7.5 cm

Q

8.1 cm

R

Ans a)_____ cm

b) The diagram shows a container that has the form of a cuboid.
   It is 15.6 cm high, 13.3 cm wide and 7.5 cm deep.
   Calculate its **volume**.
   Give your answer correct to the **nearest whole number**.

7.5 cm

15.6 cm

13.3 cm

Ans b)_____ cm^3

_____ (5 marks)

10. Look at the grid.

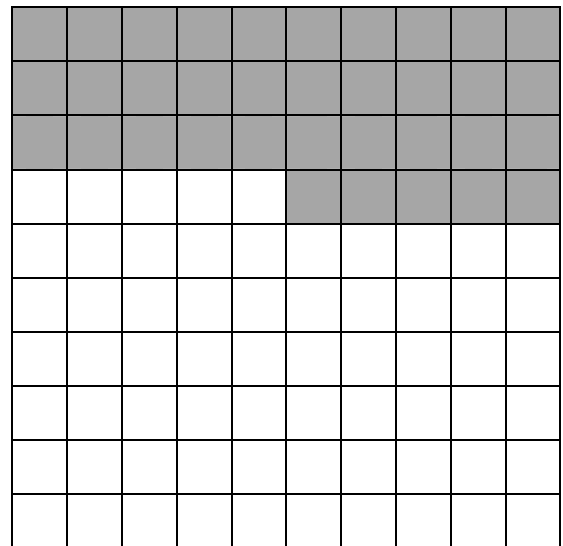a) How many squares are there in the grid?

Ans_____

b) How many squares are shaded?

Ans_____

c) What percentage of the grid is shaded?

Ans_____

d) What fraction of the grid is **not** shaded?

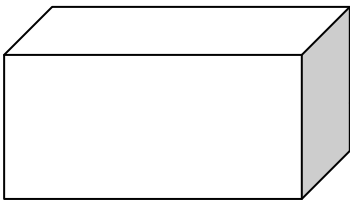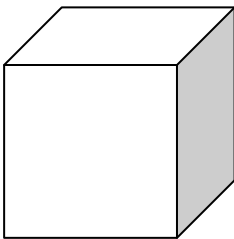Ans_____

e) Shade 10% of the grid.

_____ (5 marks)

11. Draw lines to match each solid to the correct property.
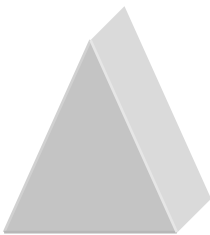One of them has been done for you.
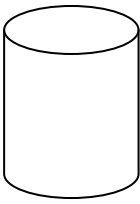
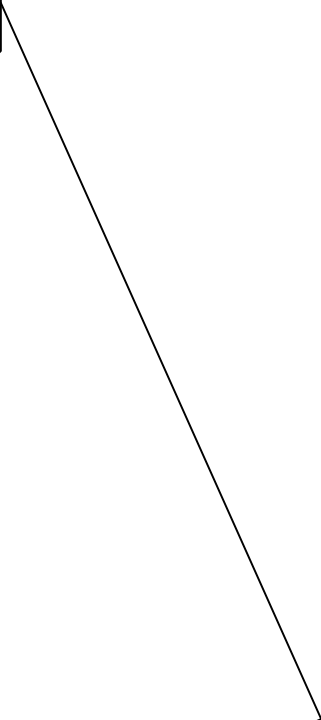
All the faces are squares.

It has 6 vertices.
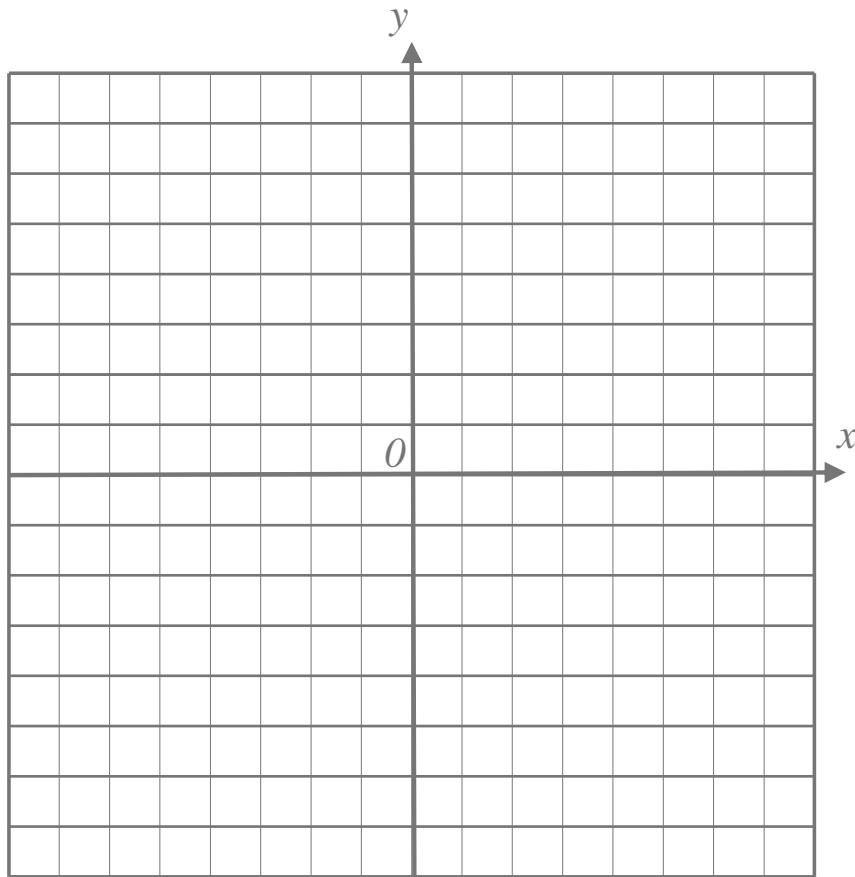
It has no vertices.

The areas of its faces are not all equal.

(3 marks)

12. a) On the graph below, plot the points A (3, 6), B (1, 1) and C (5, 1).
    b) Join A to B, B to C and C to A to form the triangle ABC.

c) Reflect triangle ABC in the *y* axis. Label the new triangle, PQR.

d) Now reflect triangle ABC in the *x* axis. Label the new triangle, XYZ.

_____ (6 marks)

END OF PAPER