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

**LEVEL 5 – 6 – 7**

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

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

### DO NOT WRITE ABOVE THIS LINE.

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

## Instructions to Candidates

- **Answer all questions.**

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

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

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1.  Work out:
    a)    525  +  475  =  _____

    b)    87   −   24  =  _____

    c)    136  ×   6   =  _____

    d)    44   ×  10  =  _____

    e)    780  ÷  10  =  _____

(5 marks)

2.  **Underline** the correct answer.

    a)    I need  **(a ruler,  a protractor,  scales)**  to measure an angle.

    b)    Angles are measured in  **(degrees,  centimetres,  grams)**.

    c)    One whole turn has  **(100°,  180°,  360°)**.

(3 marks)

3.  I go shopping and buy the following objects.  How much do I spend in all?

| | Working | Cost |
|---|---|---|
| 2 chocolates at €0.65 each | | |
| 1 packet of biscuits at €1.20 | | |
| 3 buns at €0.45 each | | |
| **TOTAL** | | |

(3 marks)

4. a) **Divide** 20 beads **equally** into 4 bags. How many beads does each bag have?

Answer: _____

b) Underline the correct answer:
The above answer is **50%** **40%** **25%** of 20.

(3 marks)

5. A man has an iron bar 1 metre long. He cuts 20 cm of it.

a) How long is the remaining part?

Answer: _____cm

b) The man cuts another 20 cm from the remaining part. How long is the remaining part now?

Answer: _____cm

(4 marks)

6.  What is the value of:   $2x + 3y$   when   $x = 4$   and   $y = 3$?

Answer: _____

(2 marks)

7.  Work out:

    a)      $(3 \times 10) + 7 =$ _____

    b)      $8 - (6 \div 2) =$ _____

(4 marks)

8.

A ┌─────────────────────────┐ B
  │ ╲                       │
  │    ╲                    │
  │       ╲                 │
  │          ╲              │
  │             ╲           │
D └─────────────────────────┘ C
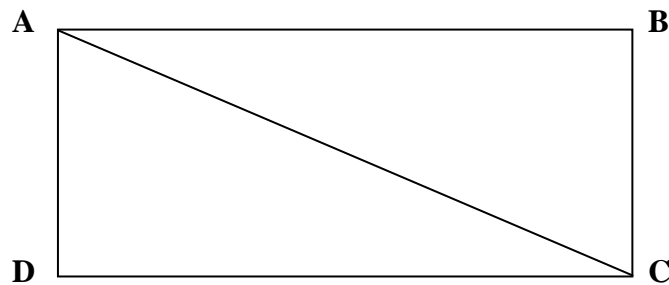
The  area of the rectangle ABCD is 24 cm$^2$.

What is the area of the triangle ACD?

Answer: _____cm$^2$

(1 mark)

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**LEVEL**
**5 – 6 – 7**

| FORM 1 | MATHEMATICS | TIME: 1h 30min |
|---|---|---|
| | Main Paper | |

| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 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)  What is the value of the underlined digit?

      (i)  **2022**  _____

      (ii) **2022**  _____

    b)  Write in **figures**:  Ninety eight.

      _____

    c)  Put these numbers in order, **smallest first**:

          342,  324,  243,  423.

      _____

                                                            (5 marks)

2.  a)  A group of friends likes to go to sports activities.

    4 friends go for football,
    6 friends go for swimming,
    4 friends go for gymnastics and
    2 friends go for athletics.

    Complete the frequency table below, putting the number of friends and the right symbol near each sports activity :

    **The symbol** ☺ **represents two children.**

    The first one is done for you.

| SPORTS | NUMBER OF FRIENDS | SYMBOL |
|---|---|---|
| Football | 4 | ☺☺ |
| Swimming | | |
| Gymnastics | | |
| Athletics | | |

    b)  Complete:

    The **mode** is _____.

    (5 marks)

Name :_____          Class :_____          LE

5 – 6

3.

| 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 |

Use the Number Square to write:

a)      the **multiples** of 5 in the square:  _____,  _____,  _____,  _____,  _____.

b)      the **square**  of the number 5:    _____

c)      the **prime** numbers less than 12:  _____,  _____,  _____,  _____,  _____.

d)      five **odd** numbers:  _____,  _____,  _____,  _____,  _____.

e)      four **factors** of 20:  _____,  _____,  _____,  _____.

(8 marks)

4.  Plot the following points and join them.

    **(1,4)** ⟶ **(4,4)** ⟶ **(3,2)** ⟶ **(2,2)** ⟶ **(1,4)**

$y$

6

5

4

3

2

1

**O**    1    2    3    4    5    6    $x$
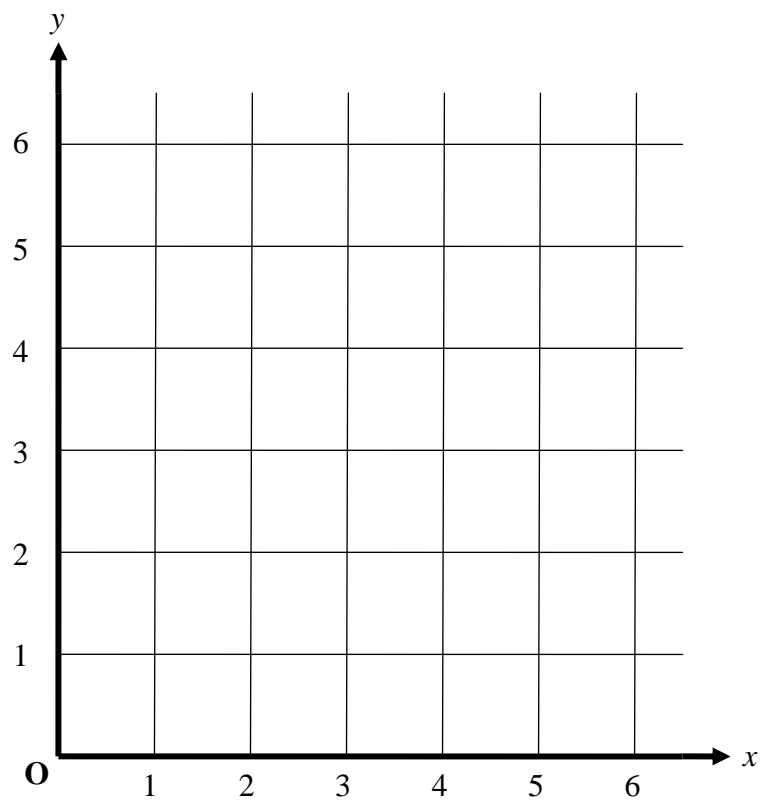
(3 marks)

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

5.
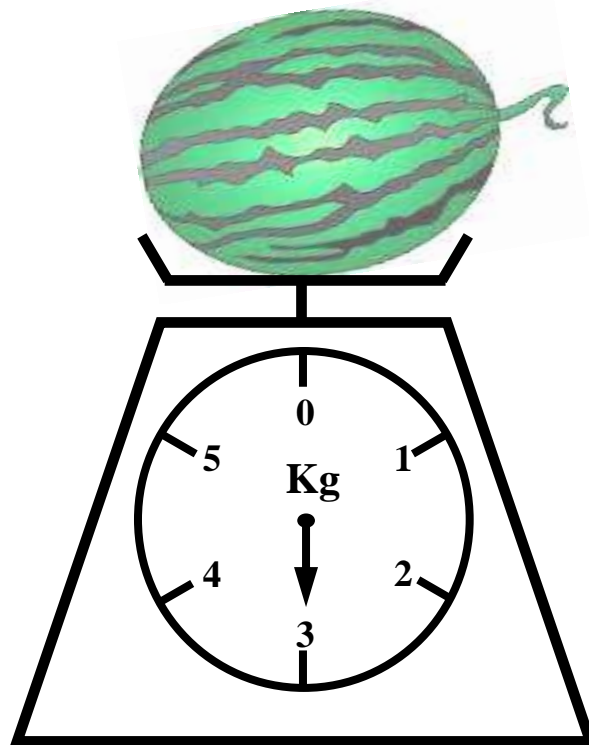
a)      The watermelon weighs _____ kilograms.

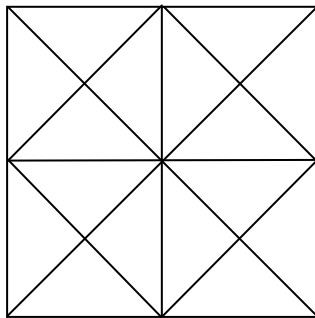b)      Place these numbers on the number line. The first one is done for you.

**2.2,    2.6,    3.8,    3.4**

**2.2**

**2**                                      **3**                                      **4**
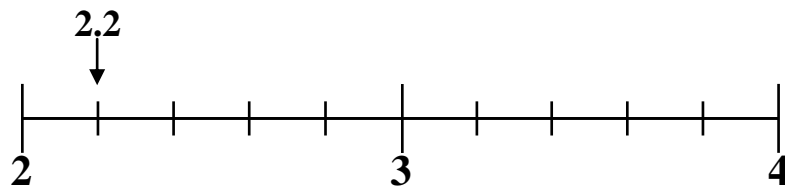
c)      Write the above numbers in order, **largest first**.

_____

_____     (6 marks)

6.  a)  Shade $\dfrac{1}{4}$ of each square in a different way.
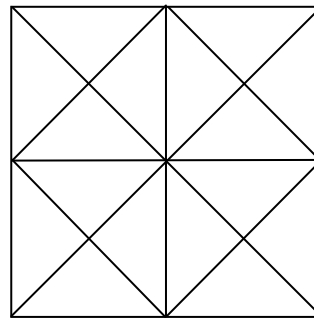


b)  Complete $\qquad \dfrac{1}{4} \quad = \quad \dfrac{\boxed{\phantom{0}}}{16}$

c)  Complete: $\quad 25\% \quad = \quad \dfrac{25}{\boxed{\phantom{00}}}$

(4 marks)

7.  a)  Fill in:
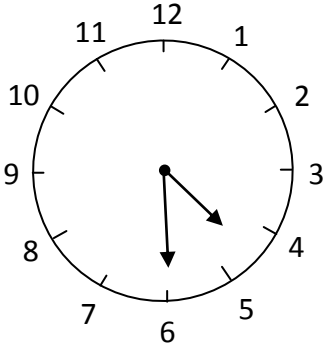
(i)  5 metres are equal to _____ centimetres.

(ii)  8000 grams make _____ kilograms.

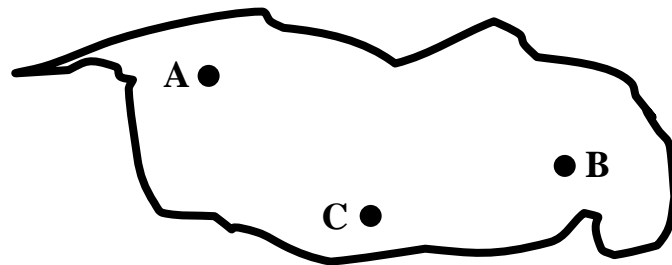(iii)  9000 millilitres make _____ litres.

b)  Write the time:

(i)

$\boxed{\textbf{07:30}}$

_____ **past** _____

(ii)



_____ **past** _____

(5 marks)

8.    a)    Use your ruler and set square to draw exactly the rectangle in this sketch.

D _____ C

                                                      4 cm

A _____ B
              8 cm
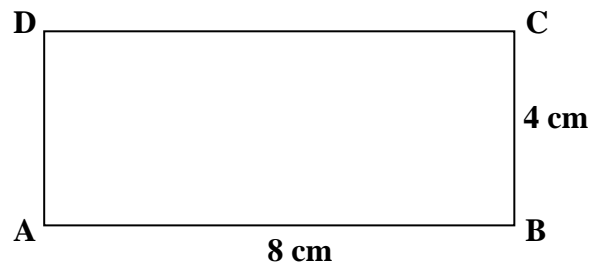
b)    A map of a small island has a **scale of 1 cm to 1.5 km**.
      **A** is 5 cm away from **B** and **C** is 3 cm away from **A**.

A ●

                                    ● B

              C ●

**Work out** the actual distance of
(i)      **A** from **B**.

Answer: _____

(ii)      **C** from **A**.

Answer: _____

(8 marks)

9. a) Complete this table:

| Number | To the nearest 10 |
|---|---|
| **89** | |
| **41** | |
| **55** | |

b) Use the rounding of numbers from the table and give a rough estimate of:

$$\frac{89 \times 41}{55}$$

Answer: _____

(5 marks)

10. a) Continue these patterns.

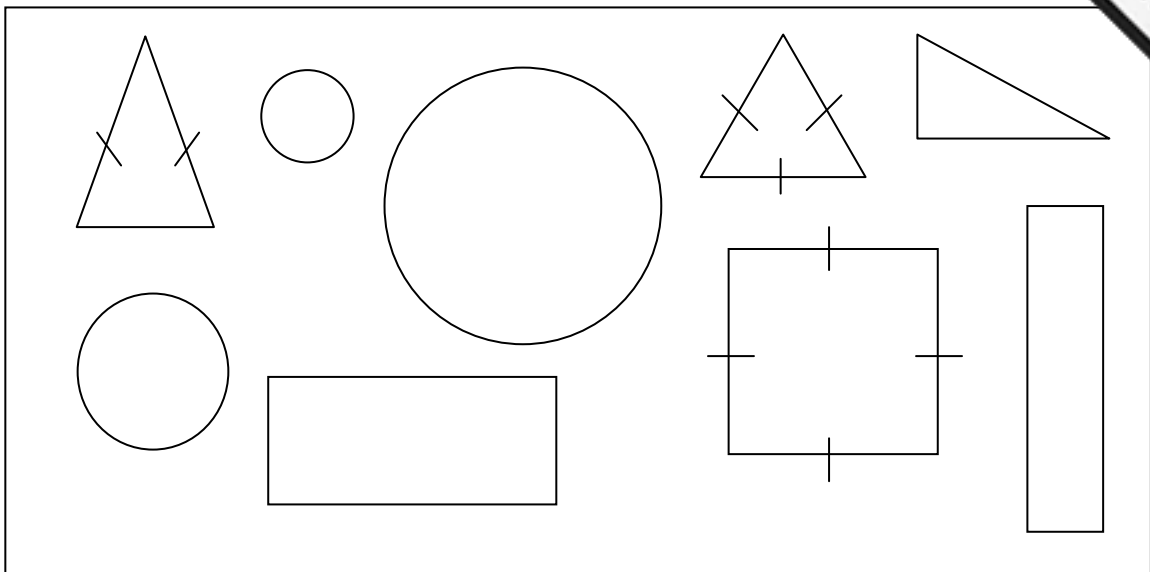(i) 5, 8, 11, _____, _____, _____.

(ii) ●, ●● , ●●● , _____, _____

b) (i) If I input the number **12** what is the output?

| INPUT | | | OUTPUT |
|---|---|---|---|
| | ⟶ | × **3** | ⟶ |
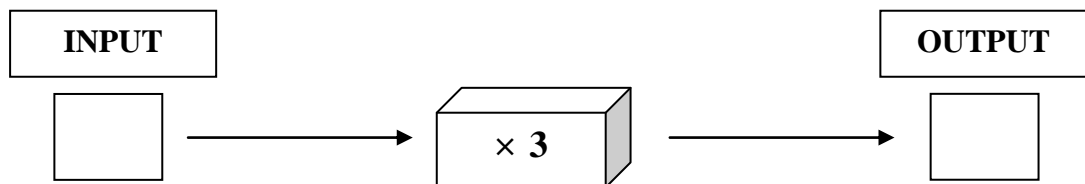
(ii) What is happening to the input in this number machine?

_____

(5 marks)

11.   a)   Look at this set of shapes:



(i)    How many circles are there?              Answer _____

(ii)   How many quadrilaterals are there?       Answer _____

(iii)  How many triangles are there?            Answer _____

(iv)   A triangle with all sides equal is called (isosceles, equilateral, scalene).

(v)    A square has all its sides (curved, long, equal).

b)   Draw a circle with a radius of 4 cm. Label the centre and the radius.

(7 marks)

12. This chart shows the pet each student has. Each student has one pet only.

| | | | = 1 student |

**Fish**

**Cat**

**Dog**

**Bird**
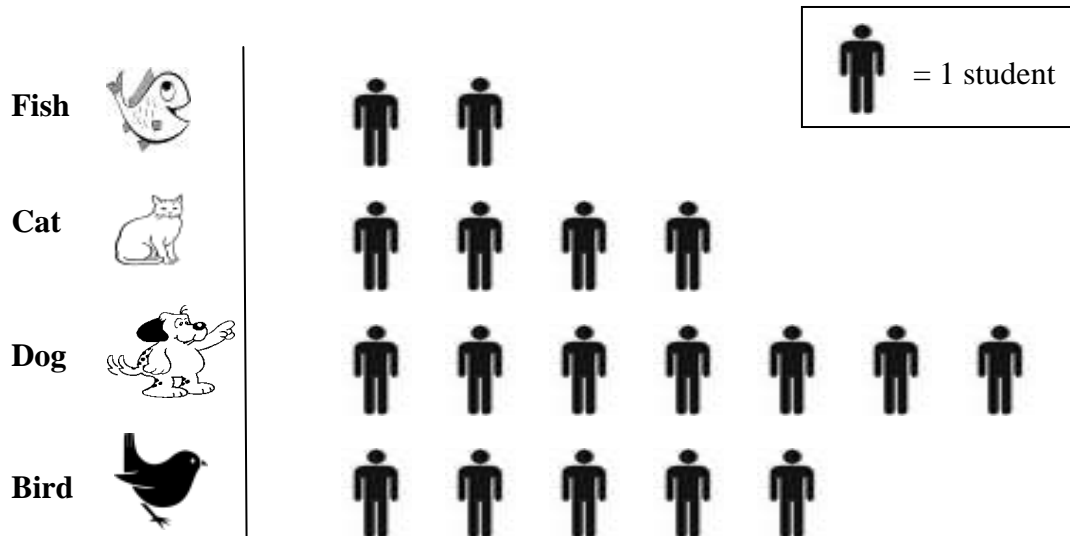
a) How many students have a cat? Answer _____

b) How many students are there in all? Answer _____
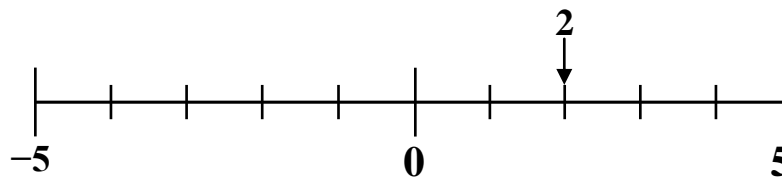
c) Which is the most common pet? Answer _____

(3 marks)

13. Write **Certain** or **Impossible** near each statement.

a) A sister is a girl. Answer _____

b) We go to Valletta by aeroplane. Answer _____
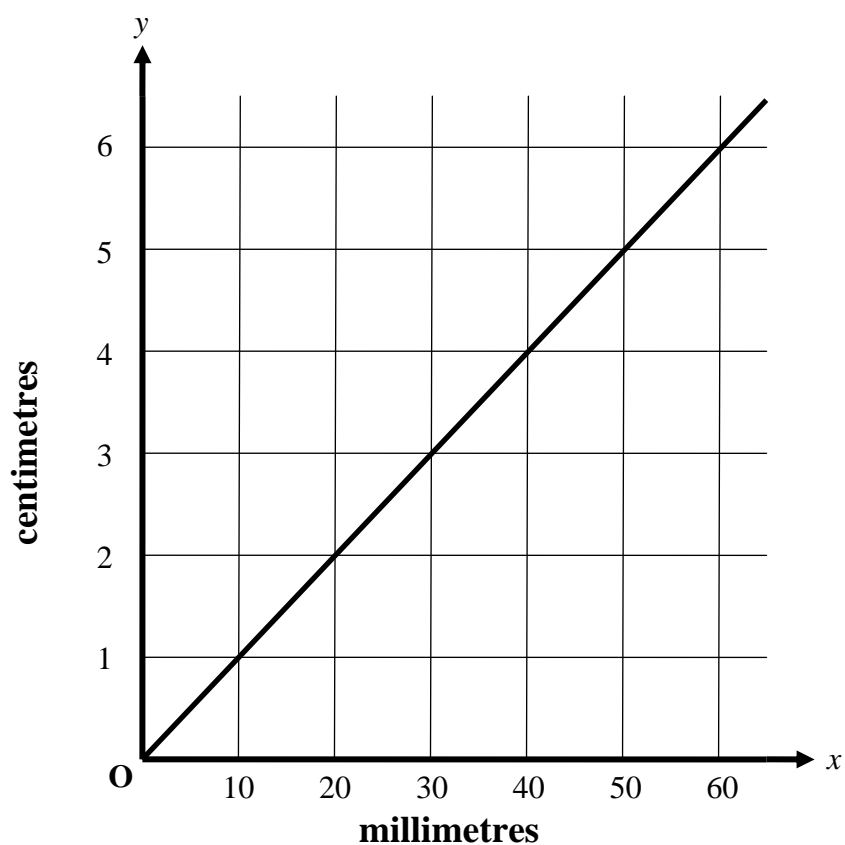
c) We play football with a ball. Answer _____

(3 marks)

14.    Place these numbers on the number line. The first one is done for you.
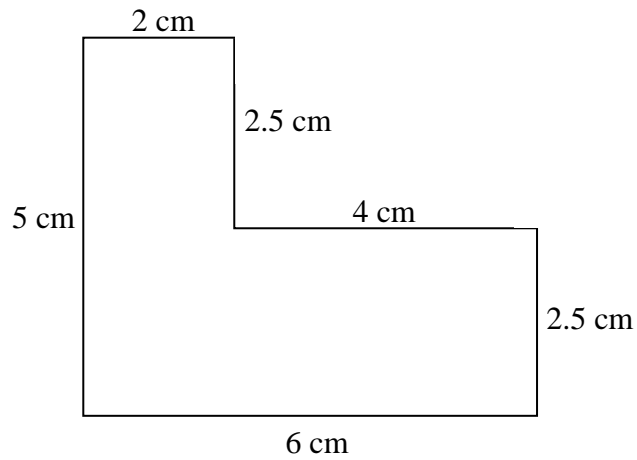
**2,      4,      −1,    −3**



(3 marks)

15.



Use this **conversion graph** to change 3 cm to millimetres.
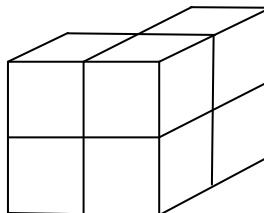
Answer:  3 cm  = _____mm

(2 marks)

16.    a)    Work out the **perimeter** of this shape.

2 cm

2.5 cm

5 cm          4 cm

2.5 cm

6 cm

Answer _____cm

b)    The solid shape below is made up of small cubes of side 1 cm.
What is the **volume** of this shape?

Answer _____cm$^3$

(3 marks)

END OF PAPER