

**Resources:**

A pen is all you'll need for this task.

A calculator should not be used at any time for these questions!

# TITLE: Multiplication and Division

Tasks:

PART ONE Squares and Square roots

Find the value of the following

- 1 a)  $3^2$  b)  $8^2$  c)  $2^3$  d)  $7^3$  e)  $4^4$

Find the square root of the following

- 2 a) 81 b) 121 c) 196 d) 676

Find the Cube root of the following

- 3 a) 8 b) 64 c) 729

Estimate the answers to the following

- 4  
a)  $3.2 + 6.1$  b)  $12.9 \times 13.1$  c)  $4.9^2$  divided by 4.3

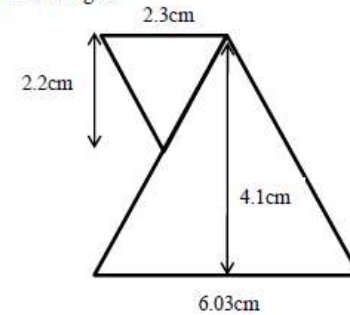
5

Work out

- a**  $(8 - 3)^2 + 4$     **b**  $8 \div 2 \times 3 + 1$     **c**  $20 \div (2 - 6)$   
**d**  $-6 \times (2 - 5)^2$     **e**  $\frac{5 \times 9}{3}$     **f**  $(15 \times 4) \div (16 \times 5)$

PART THREE – Problem solving

This shape is made from two triangles.



- (a) Work out an estimate for the total area of the shape.

..... cm<sup>2</sup>  
(3)

- (b) Is your answer to (a) an overestimate or an underestimate?  
Give a reason for your answer.

.....  
 ..... (1)

# Stretch

1)

Find the square root of 9216

2)

Find the cube root of 91,125

3)

Find the value of  $56^3$

4)

**Finance** At a sale, sheep cost £95 and lambs cost £125. A farmer buys some sheep and lambs. He pays a total of £1190. How many sheep and lambs does the farmer buy?

5)

A tour company starts tours at 9 am each day. The castle tours leave every 15 minutes and the museum tours leave every 20 minutes. When do the castle and museum tours next leave at the same time?