

www.mrc-papers.com



CLASSIFIED

International Examinations Papers

Mob: +974 55249797 / 55258711

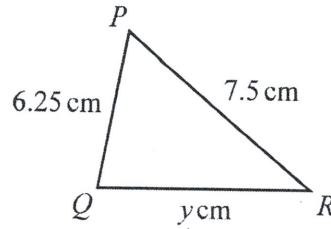
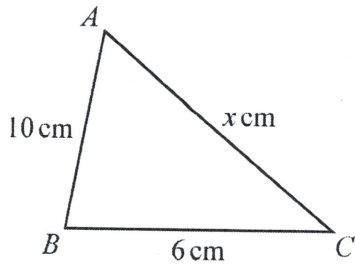
E-mail: rashed.saba@gmail.com

MATHEMATICS -CORE

TOPIC- Congruent & similar
triangles

1

13-N-15



NOT TO SCALE

The diagram shows two similar triangles ABC and PQR .

Find the value of

(a) x ,

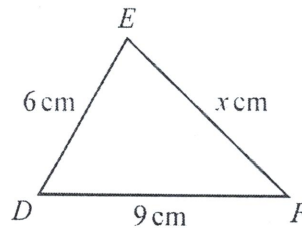
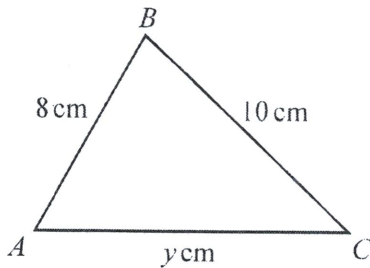
Answer(a) $x = \dots\dots\dots$ [2]

(b) y .

Answer(b) $y = \dots\dots\dots$ [2]

2

11-7-15



NOT TO SCALE

Triangle ABC is similar to triangle DEF .

Calculate the value of

(a) x ,

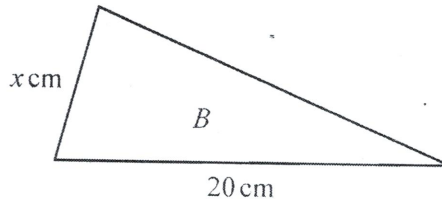
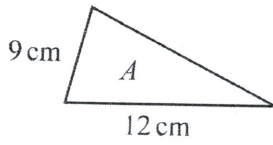
Answer(a) $x = \dots\dots\dots$ [2]

(b) y .

Answer(b) $y = \dots\dots\dots$ [2]

03

12-7-16



NOT TO SCALE

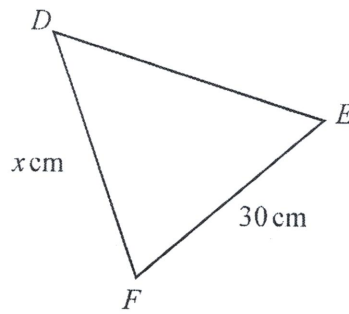
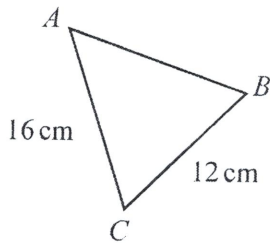
Triangle A and triangle B are similar.

Find the value of x .

$x = \dots\dots\dots$ [2]

04 : Triangles ABC and DEF are similar.

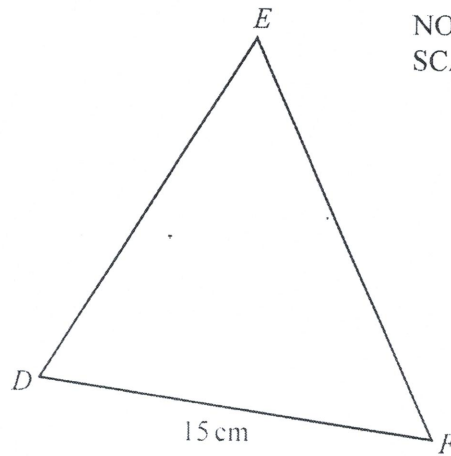
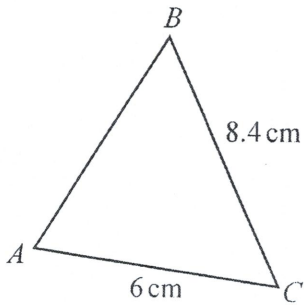
13-11-16



NOT TO SCALE

Find the value of x .

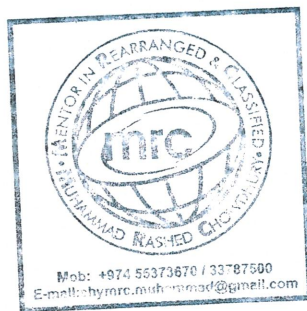
5 Triangle ABC and triangle DEF are similar.



NOT TO SCALE

Calculate the length of EF .

$EF = \dots\dots\dots\text{ cm}$ [2]



11 Simplify.

$$x^3y^4 \times x^5y^3$$

..... [2]

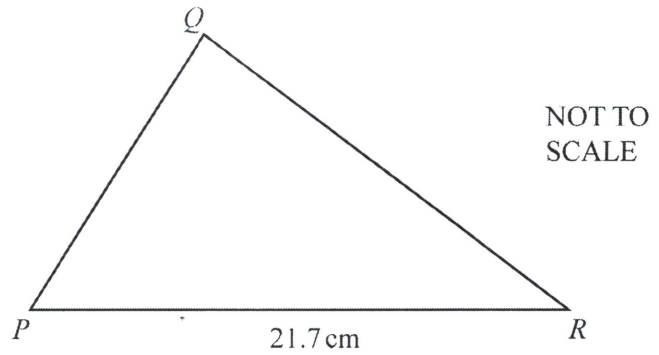
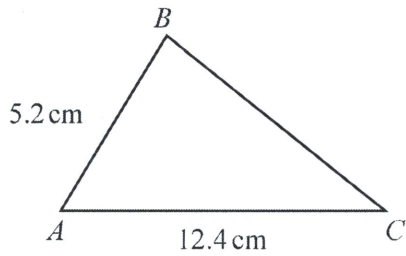
12 (a) Write down the value of 17^0 .

..... [1]

(b) Explain why $\sqrt{17}$ is irrational.

..... [1]

06, Triangle ABC is similar to triangle PQR .

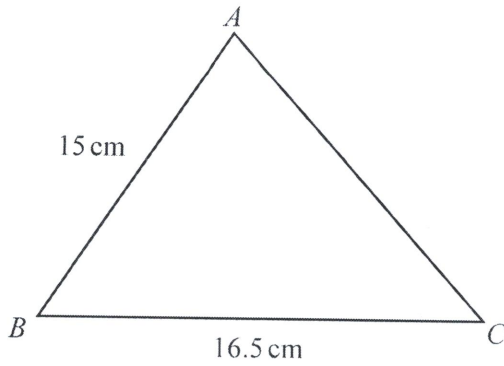


Find PQ .

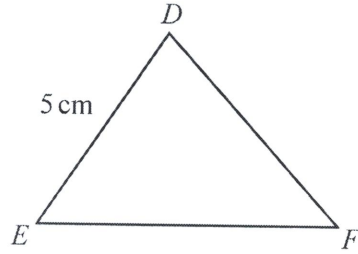
$PQ = \dots\dots\dots$ cm [2]

07

J-12-17



NOT TO SCALE



Triangles *ABC* and *DEF* are similar.

Find the length of *EF*.

EF = cm [2]

19 The exchange rate between dollars and euros(€) is €1 = \$1.158 .

(a) Felicity changes €4900 into dollars.

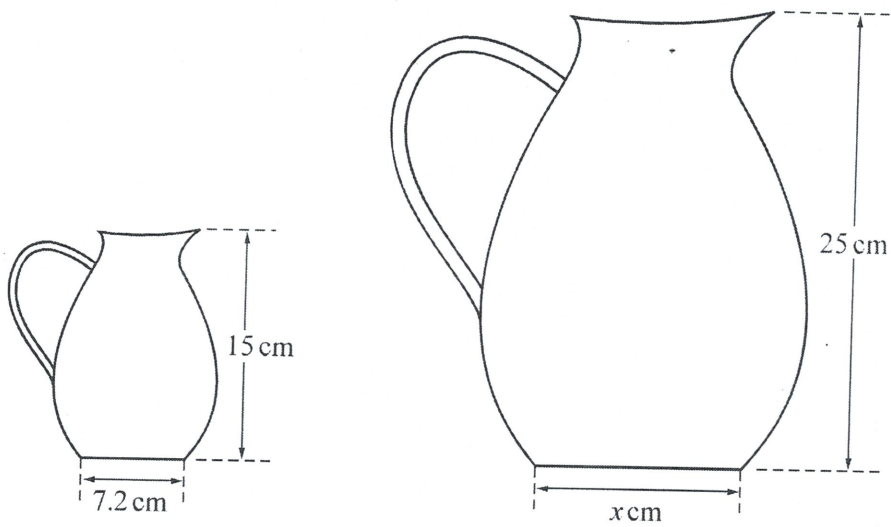
Work out how many dollars she receives.

\$ [1]

(b) Ricky changes \$2895 into euros.

Work out how many euros he receives.

€ [2]



NOT TO
SCALE

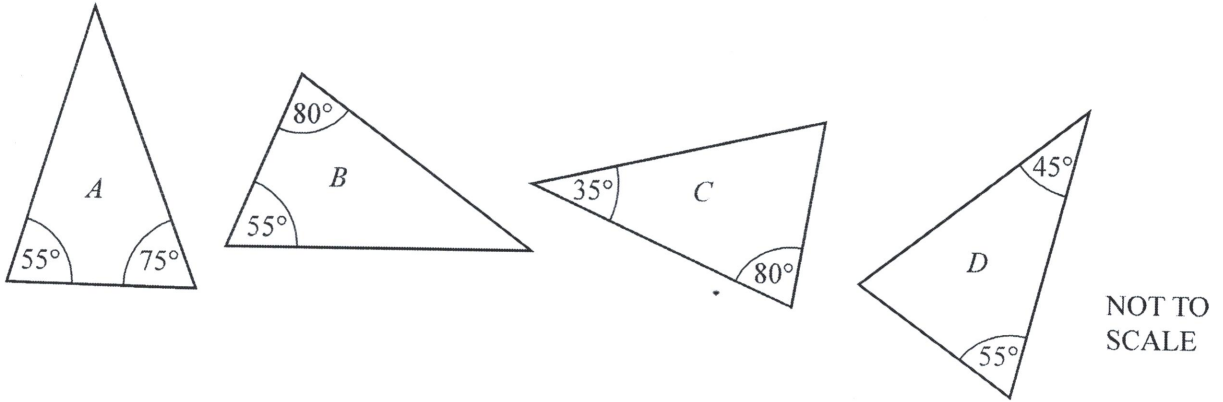
The diagram shows two jugs that are mathematically similar.

Find the value of x .

Answer $x = \dots\dots\dots$ [2]



09 (a)

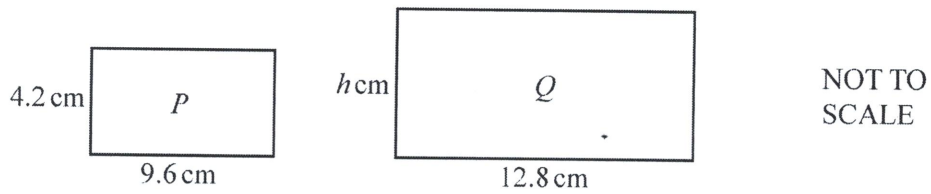


Two of these triangles are similar.

Write down the letters of these two triangles.

..... and [1]

(b)



Rectangle *P* is similar to rectangle *Q*.

Work out the value of *h*.

$h =$ [2]

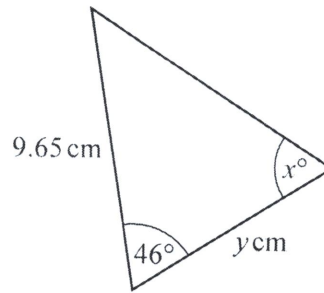
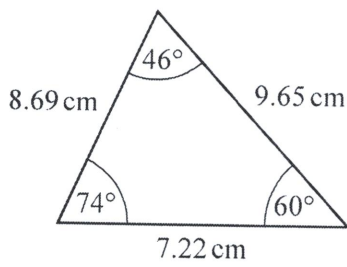


Each exterior angle of a regular polygon is 30° .

Work out the number of sides the polygon has.

Answer [2]

10



NOT TO SCALE

These two triangles are congruent.
Write down the value of

(a) x ,

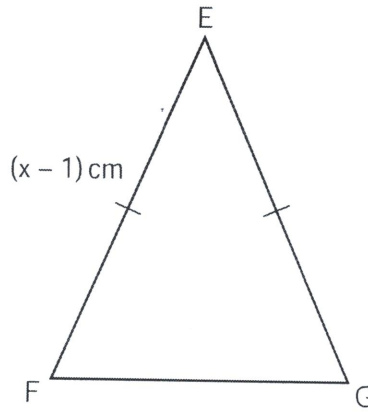
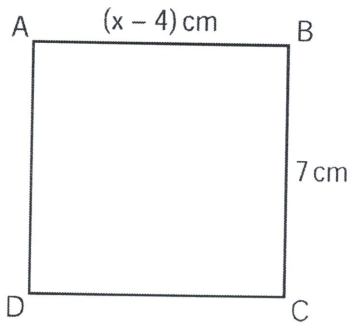
Answer(a) $x =$ [1]

(b) y .

Answer(b) $y =$ [1]



11 +



NOT TO SCALE

(a) $ABCD$ is a square.

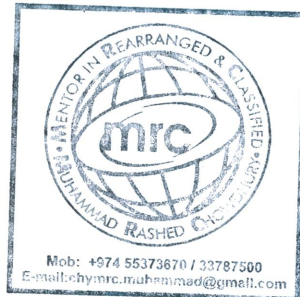
Find the value of x .

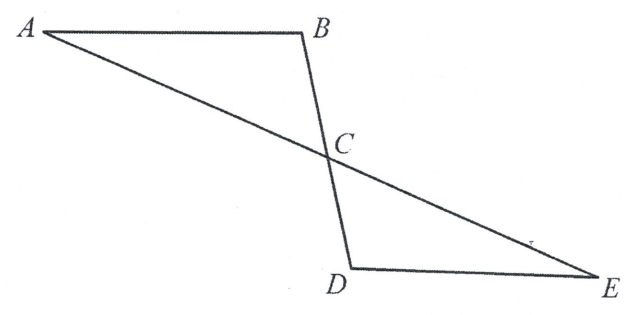
Answer(a) $x = \dots\dots\dots$ [1]

(b) Square $ABCD$ and isosceles triangle EFG have the same perimeter.

Work out the length of FG .

Answer(b) $FG = \dots\dots\dots$ cm [2]





NOT TO SCALE

The diagram shows two straight lines, AE and BD , intersecting at C .
Angle $ABC =$ angle EDC .
Triangles ABC and EDC are congruent.

Write down **two** properties of line segments AB and DE .

Answer AB and DE are

and [2]

