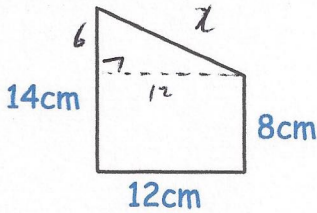


24th May



Corbettmaths



$$x^2 = 6^2 + 12^2$$

$$x^2 = 180$$

$$x = 13.42$$

A frame is made from wire. The frame is a trapezium. Calculate the total amount of wire needed to make the frame.

Give your answer to 1 decimal place.

$$14 + 12 + 8 + 13.42 = 47.42$$

$$47.4 \text{ cm}$$

The equation below can have irrational or rational solutions.

$$5x^2 = \frac{1}{a} \quad x^2 = \frac{1}{5a}$$

Write down a value for a which gives rational solutions.

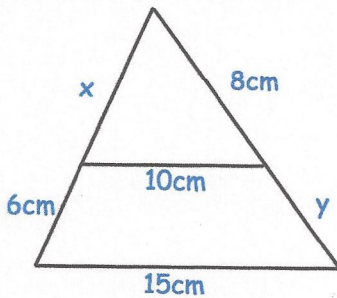
Possible answers
 $a = 5$
 $a = 20$ etc
 $a = 1.8$

Write down a value for a which gives irrational solutions.

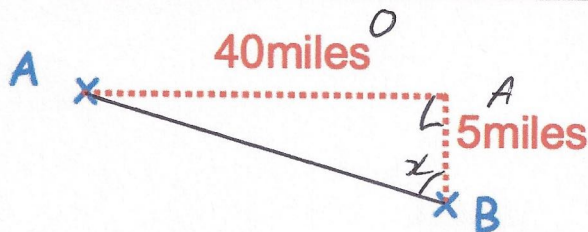
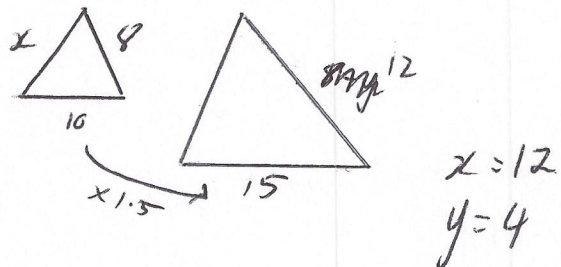
$a = 3$ $a = \pi$
 $a = 1$ etc

Write down a value for a which gives no solutions.

e.g. negative values
 $a = -3$ $a = -100$
 etc



Find x and y.



Calculate bearing of A from B.

$$\tan x = \frac{40}{5}$$

$$x = 82.87$$

$$360 - 82.87$$

$$277.1^\circ$$