



TARANG SCIENTIFIC INSTRUMENTS

DHARWAD

Phone : 0836-2775204

Cell : 94482 31960

www.tarangscientificinstruments.com

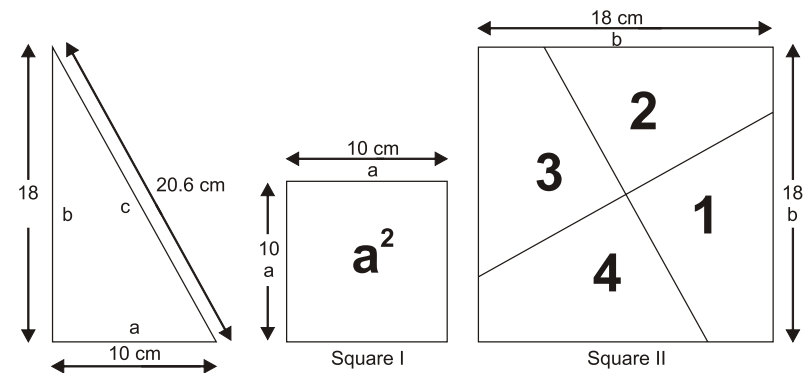
PYTHAGORUS THEOREM

To show that in a right angled triangle square of the hypotenuse is equal to the sum of the squares of the other two sides.

Assembly :

Consists of a right angled triangle & two squares cut out of 12 mm Eva rubber sheet of following sizes. The square 2 is cut into 4 pieces of shape as shown below.

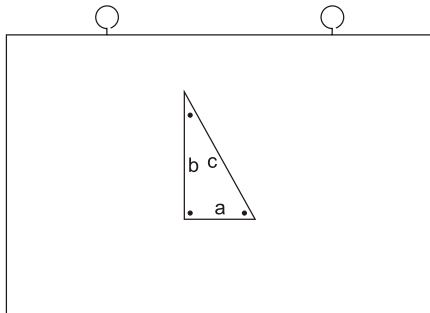
A base of 440 mm x 390 mm made out of 12 mm Eva rubber with hooks and pins are part of the kit.



To do and observe :

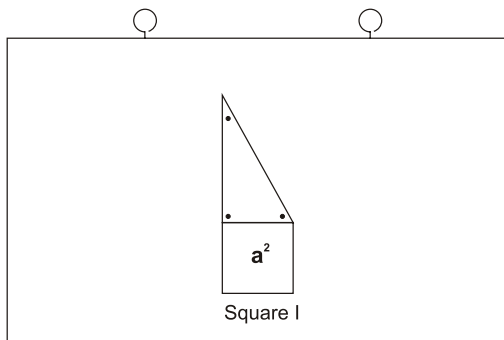
Step 1 :

Take the given right angled triangle and fix it to the base as shown in the diagram.



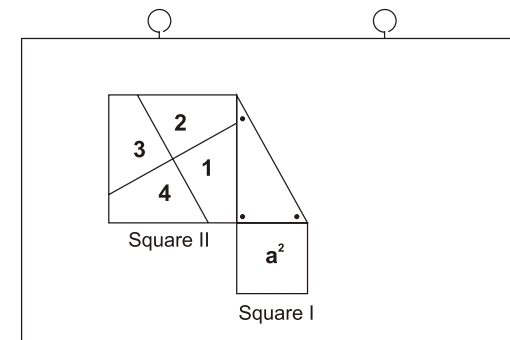
Step 2 :

Fix the square 1 to the base of the right angled triangle as shown.



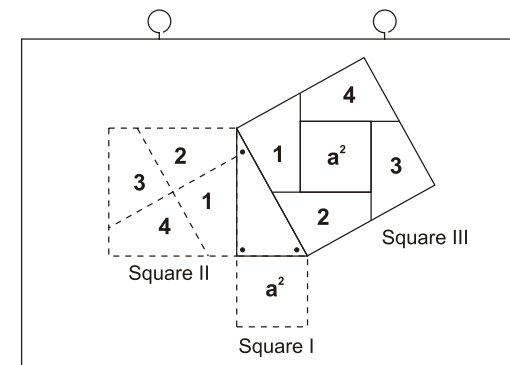
Step 3 :

Arrange the four piece of square 2 to adjacent side of the right angled triangle as shown below.



Step 4 :

Now arrange the 4 pieces of square 2 and square 1 on the hypotenuse of the triangle as shown to form square 3



Observe that area of square III

$$\begin{aligned} &= \text{area of square I} + \text{Area of 4 pieces of square II} \\ &= \text{Area of square I} + \text{Area of square II} \end{aligned}$$

Result :

Area of the square formed on the hypotenuse of the right angled triangle is equal to the sum of the areas of the squares formed on the other two sides.