

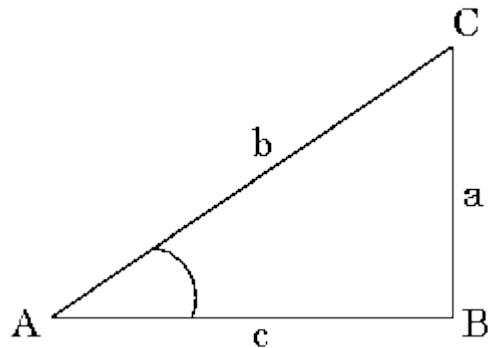
Answer on Question #48182, Physics, Other

If a right angled triangle label A B C and A=3 B=4 what is C equal to

Solution.

Two possible cases (check condition which one is your):

1)

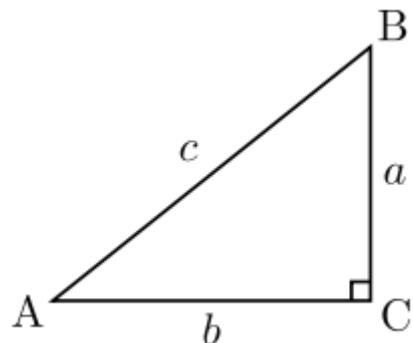


Then due to Pythagorean theorem:

$$a^2 + c^2 = b^2 \text{ And}$$

$$c = \sqrt{b^2 - a^2} = \sqrt{16 - 9} = \sqrt{5} \approx 2.2$$

2)



Then due to Pythagorean theorem:

$$a^2 + b^2 = c^2 \text{ And}$$

$$c = \sqrt{b^2 + a^2} = \sqrt{16 + 9} = \sqrt{25} = 5.$$

Answer:

1) $c = \sqrt{5} \approx 2.2$

2) $c = 5$