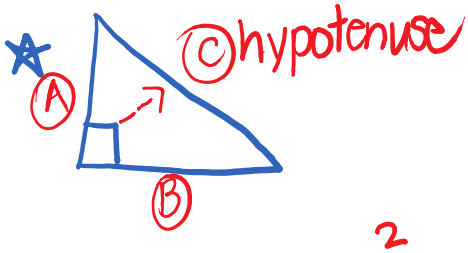
U0L2: Pythagorean Theorem

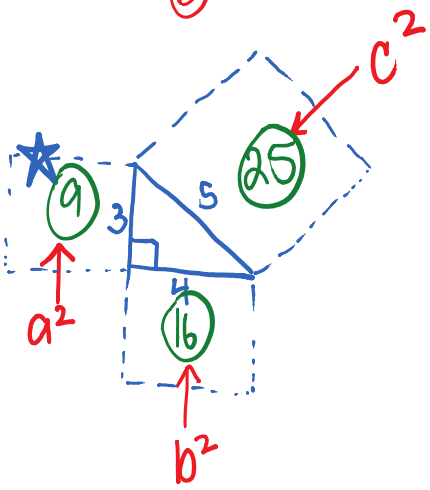
Oct. 1, 2014

October-01-14 8:28 AM

★ Formula: $A^2 + B^2 = C^2$ OR $C^2 - B^2 = A^2$

$C^2 - A^2 = B^2$

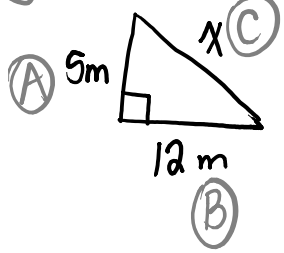




⇒ carpenter's triangle

PROOF 😊

eg 1) Find x:



Steps:

✓ • label A, B, C

✓ • write formula

✓ • substitute & solve

$a^2 + b^2 = c^2$

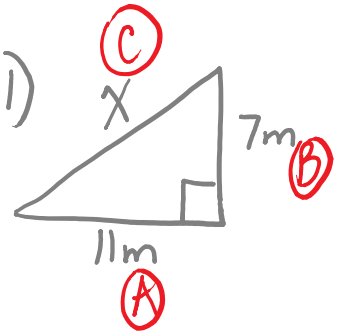
$5^2 + 12^2 = c^2$

$25 + 144 = c^2$

$\sqrt{169} = \sqrt{c^2}$

$13\text{m} = c$ ✓

try #1)



$a^2 + b^2 = c^2$

$11^2 + 7^2 = c^2$

$121 + 49 = c^2$

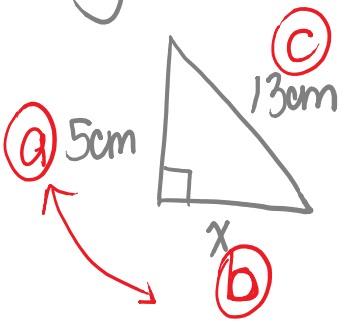
$\sqrt{170} = \sqrt{c^2}$

11m
(A)

$\sqrt{170} = \sqrt{c^2}$

$13.03 = c$ OR $13 = c$ ✓

eg 2) Finding x (but x is A or B).



$c^2 - a^2 = b^2$

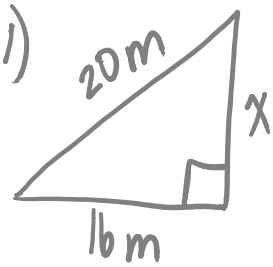
$13^2 - 5^2 = b^2$

$169 - 25 = b^2$

$\sqrt{144} = \sqrt{b^2}$

$12 = b$ ✓

try #1)



$x = 12m$ ✓

Assignment:

#1-4 (find c)

#8-11 (find a or b)

BONUS: ② of them