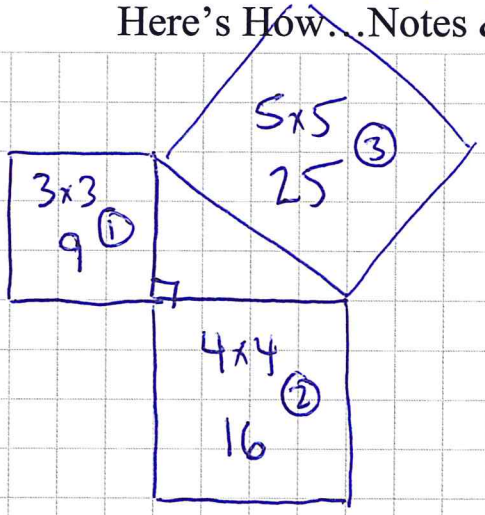
Date: ___/___/___

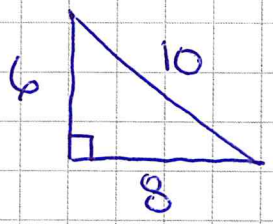
Goal: I will be able to use the Pythagorean Theorem to find the sides of a right triangle

Tool Bag
Formulas, equations, vocabulary, etc.

Here's How...Notes & Examples



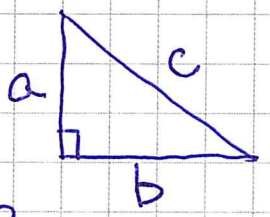
$A_1 + A_2 = A_3$
$3 \cdot 3 + 4 \cdot 4 = 5 \cdot 5$
$3^2 + 4^2 = 5^2$
$9 + 16 = 25$
$25 = 25$



$6^2 + 8^2 = 10^2$
$36 + 64 = 100$
$100 = 100$

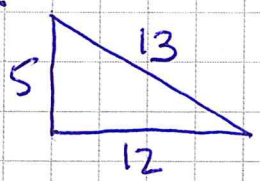
Pythagorean Theorem

for a right triangle
$a^2 + b^2 = c^2$



Examples

Is this a right triangle?
$a^2 + b^2 = c^2$
$5^2 + 12^2 = 13^2$
$25 + 144 = 169$
$169 = 169$ yes! :)



What is the missing side?
$a^2 + b^2 = c^2$
$3^2 + 9^2 = c^2$
$9 + 81 = c^2$
$90 = c^2$
$\sqrt{90} = \sqrt{c^2}$ $c = \sqrt{90}$