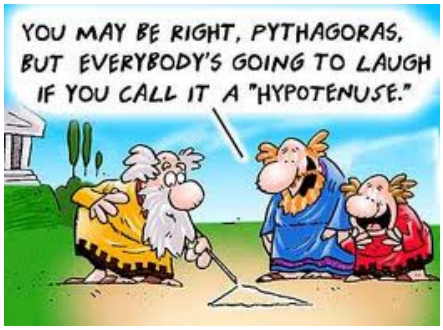
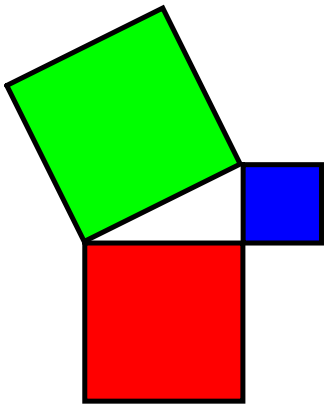

YOU MAY BE RIGHT, PYTHAGORAS, BUT EVERYBODY'S GOING TO LAUGH IF YOU CALL IT A "HYPOTENUSE."

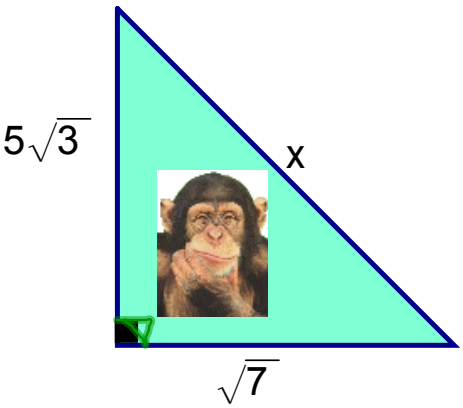
Pythagorean Theorem

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



$h^2 = a^2 + b^2$

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



$x^2 = (\sqrt{7})^2 + (5\sqrt{3})^2$

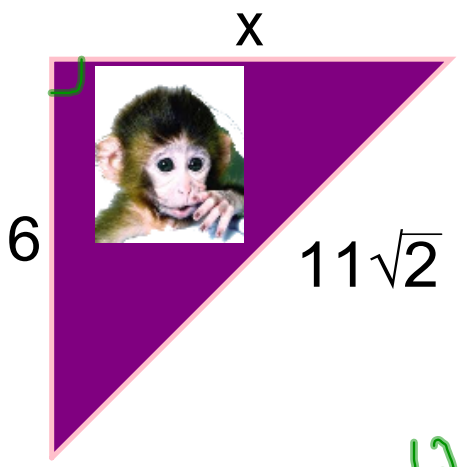
$x^2 = 7 + 25(3)$

$x^2 = 7 + 75$

$\sqrt{x^2} = \sqrt{82}$

$x = 9.1$

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



$(11\sqrt{2})^2 = (6)^2 + x^2$

$121(2) = 36 + x^2$

$242 = 36 + x^2$

$x^2 + 36 = 242 - 36$

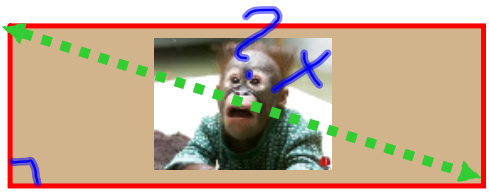
$\sqrt{x^2} = \sqrt{206}$

$x = 14.3$

Determine the length of the diagonal.

$h^2 = a^2 + b^2$

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



$h^2 = a^2 + b^2$

$x^2 = (\sqrt{2})^2 + (3\sqrt{5})^2$

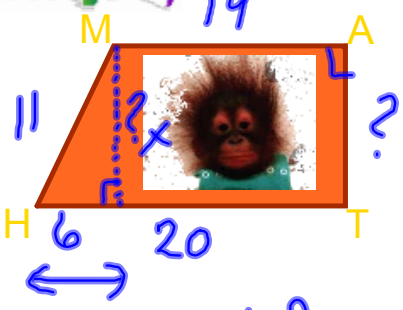
$x^2 = 2 + 9(5)$

$x^2 = 2 + 45$

$\sqrt{x^2} = \sqrt{47}$

$x = 6.9$

Tricky :)



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

HM=11, HT = 20, MA=14
What is the lenght of AT?

$h^2 = a^2 + b^2$

$(11)^2 = (6)^2 + x^2$

$121 = 36 + x^2$

$36 + x^2 = 121$

$\sqrt{x^2} = \sqrt{85}$

$x = 9.2$