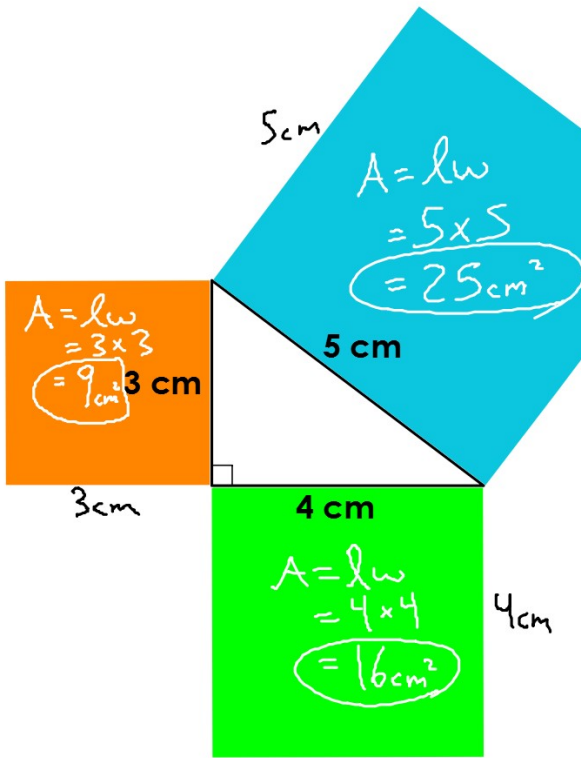
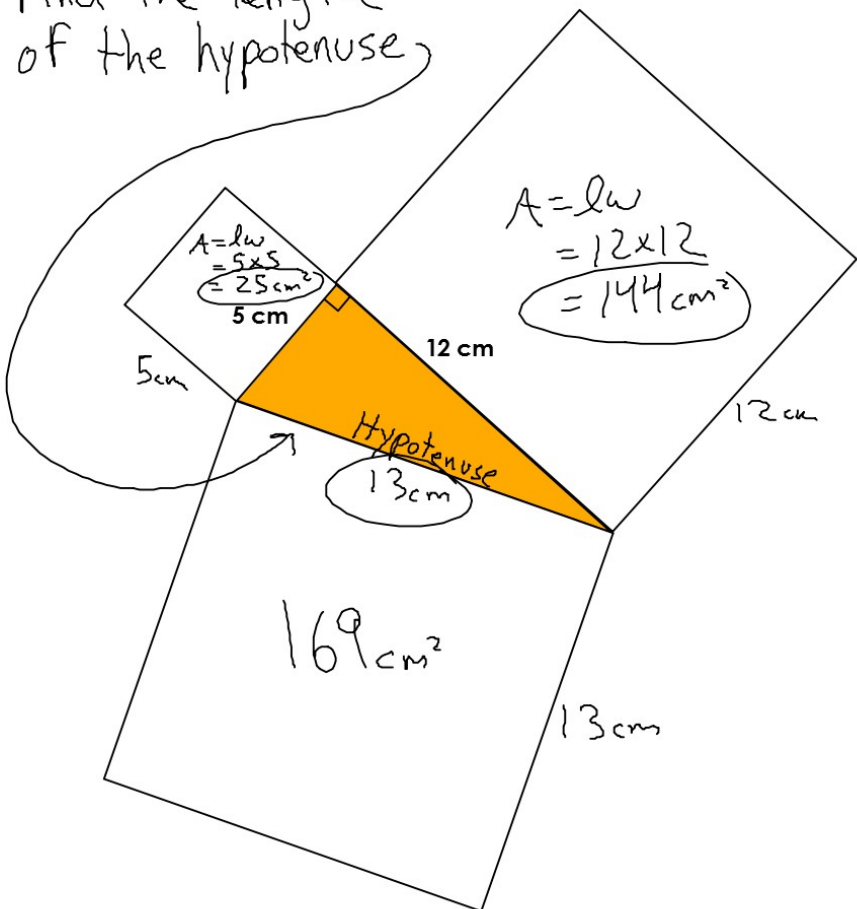


Introduction to the Pythagorean Theorem



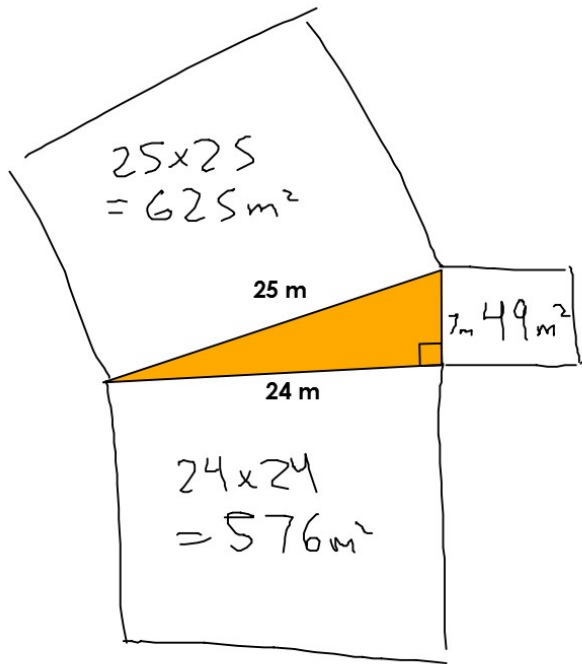
- ← has a right angle (90°)
- right triangle
- "hypotenuse" is the longest side and is across from the 90° angle
- $3 + 4$ does NOT equal 5.

Find the length of the hypotenuse



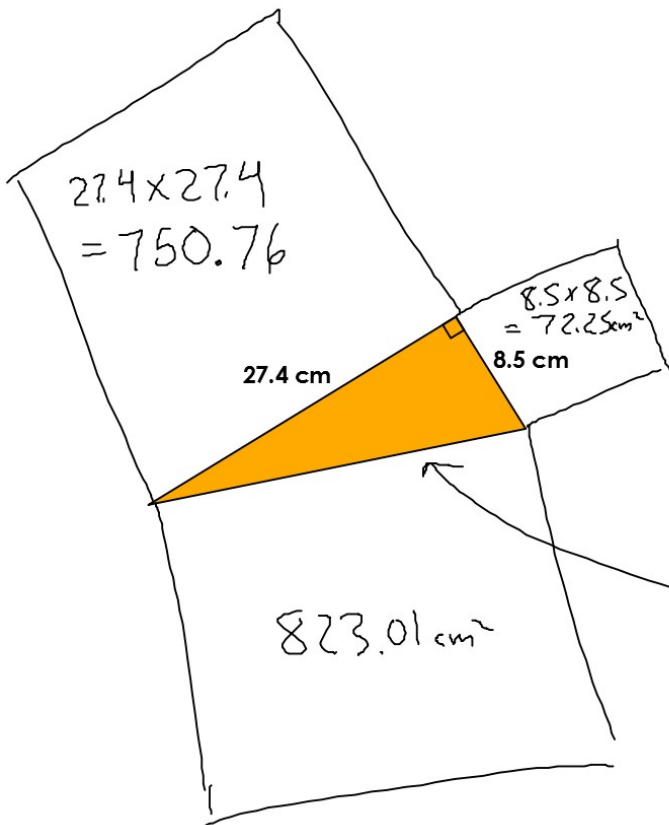
Area of hypotenuse square
 \downarrow
 $25 + 144 = 169$
 $\sqrt{169} = 13 \text{ cm}$
 length of hypotenuse

Find the missing side (it's not the hypotenuse!).



$$625 - 576 = 49$$

$$\sqrt{49} = \underline{\underline{7\text{ m}}}$$



$$750.76 + 72.25 = 823.01$$

$$\sqrt{823.01} = \underline{\underline{28.7\text{ cm}}}$$