

**Goal:** I will be able to find any missing side of a right triangle.

**Tool Bag**

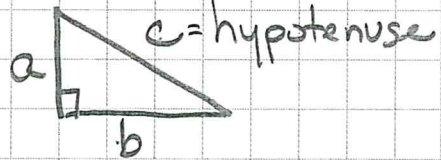
Formulas, equations, vocabulary, etc.

Pythagorean Theorem

Example

Here's How... Notes & Examples

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



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

$$5^2 + b^2 = 13^2$$

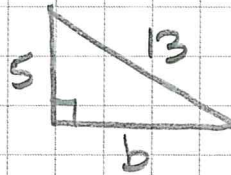
$$25 + b^2 = 169$$

$$25 - 25 + b^2 = 169 - 25$$

$$b^2 = 144$$

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

$$b = 12$$



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

$$6^2 + b^2 = 10^2$$

$$36 + b^2 = 100$$

$$36 - 36 + b^2 = 100 - 36$$

$$b^2 = 64$$

$$\sqrt{b^2} = \sqrt{64}$$

$$b = 8$$

