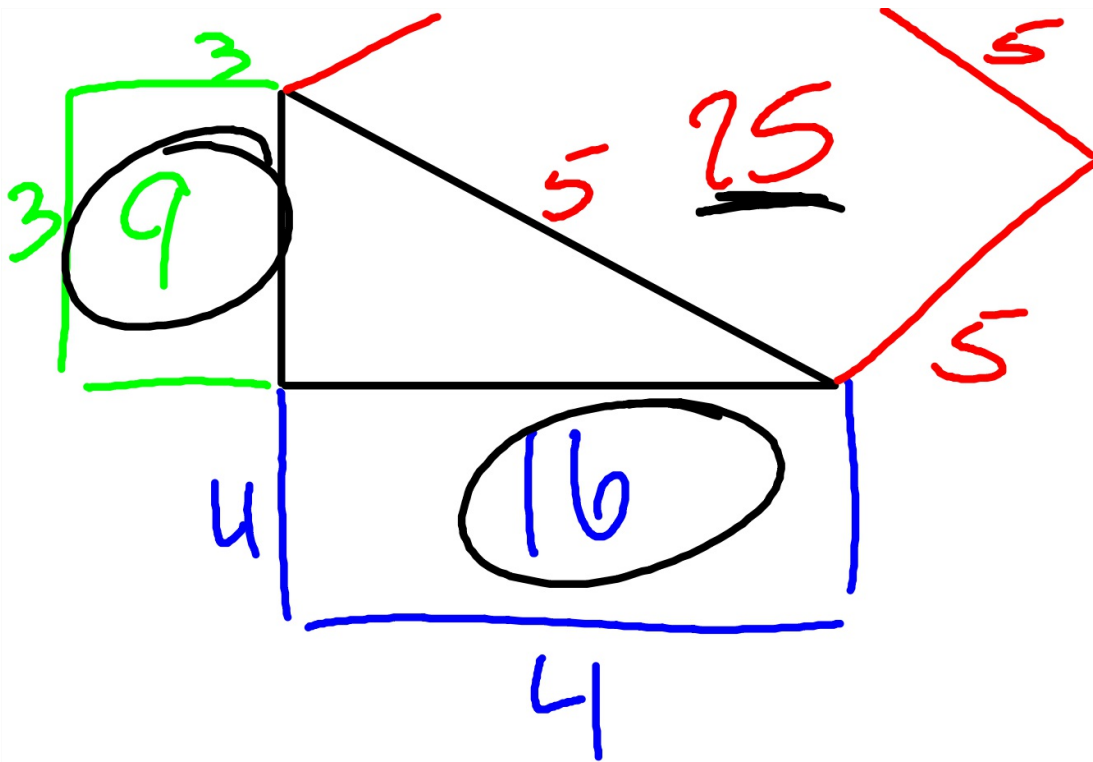
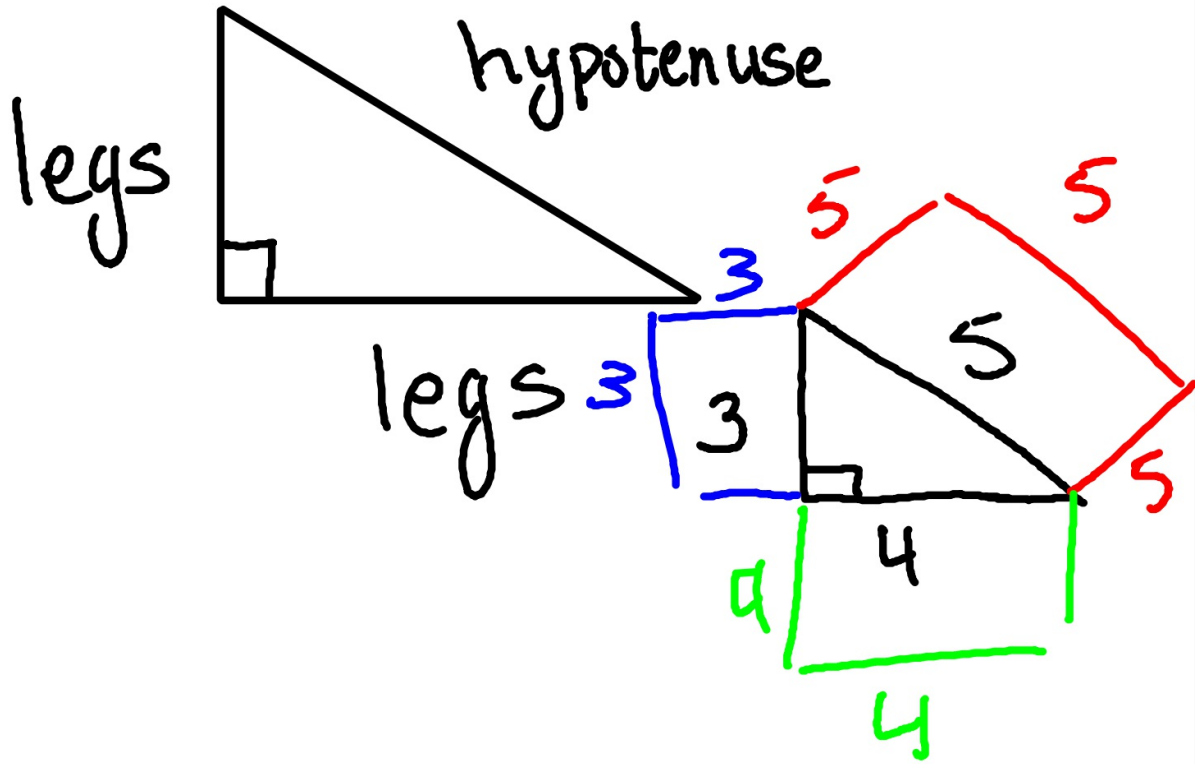
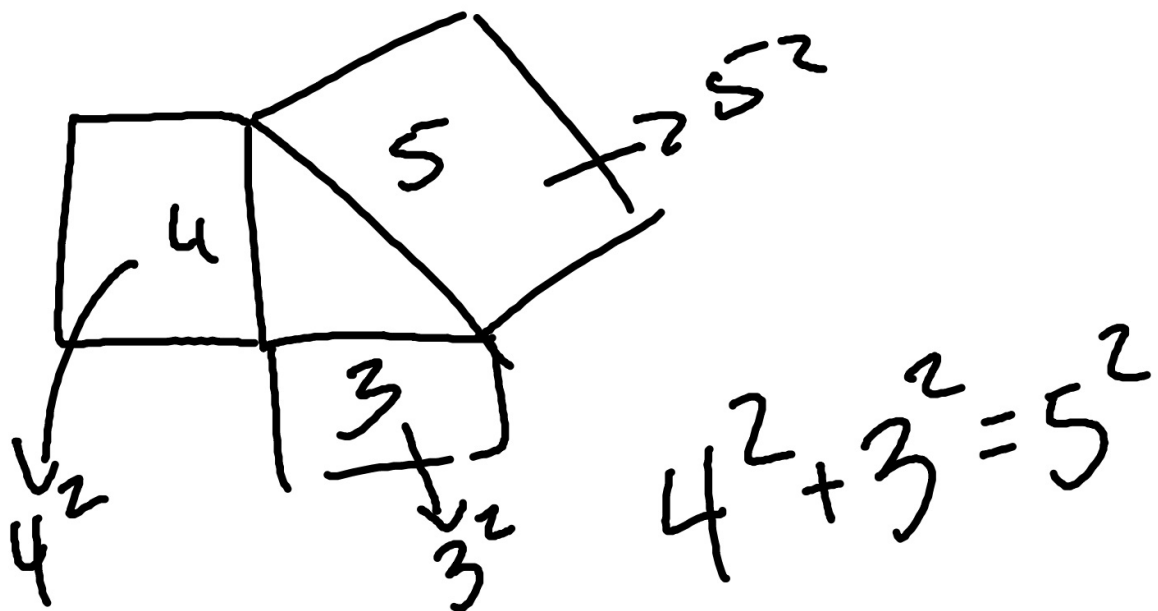
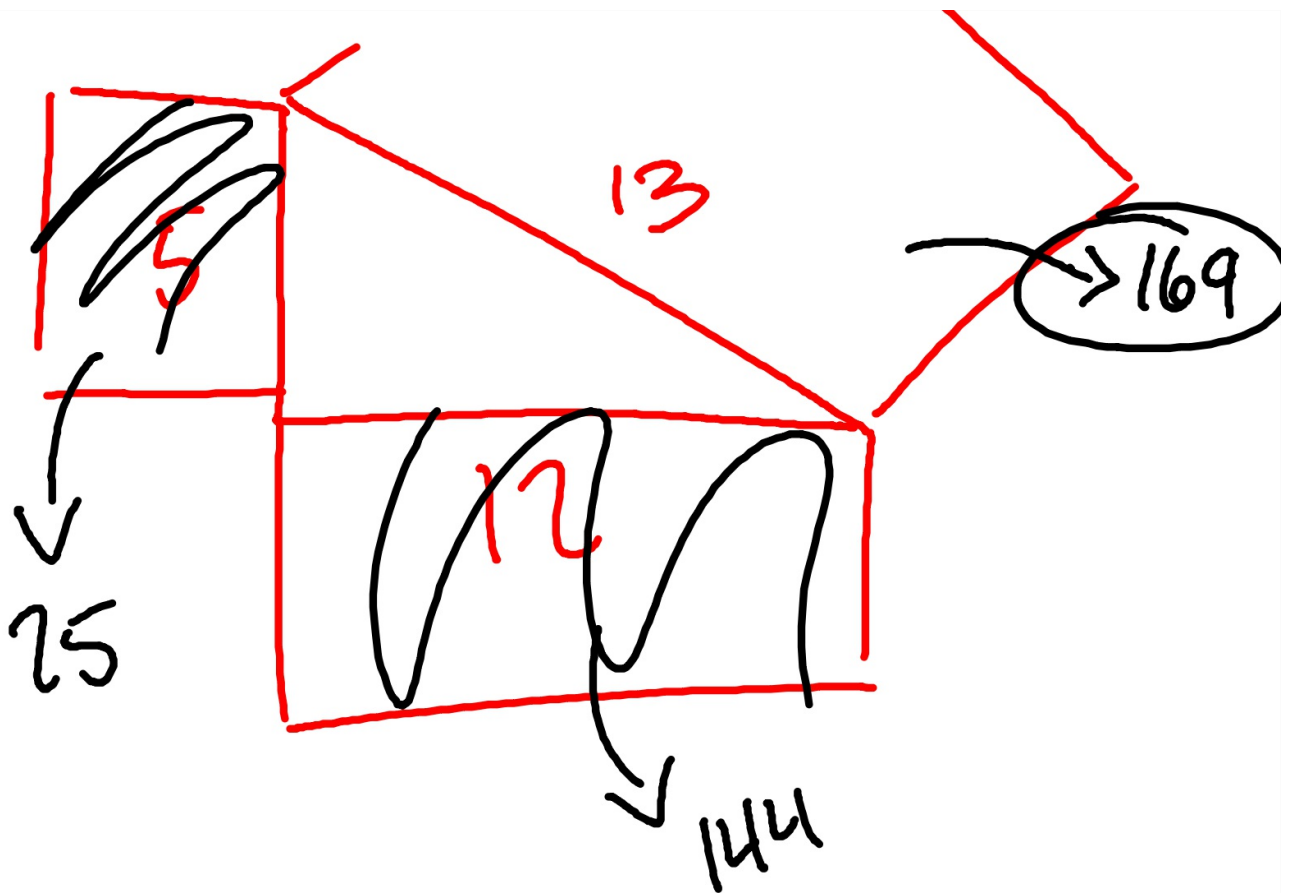
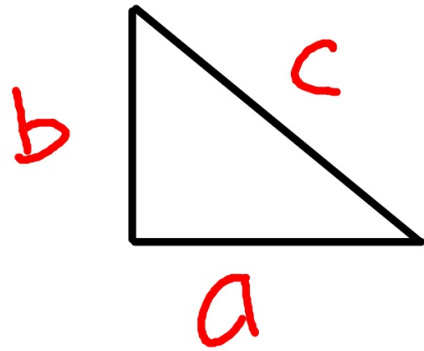


Pythagorean Theroem



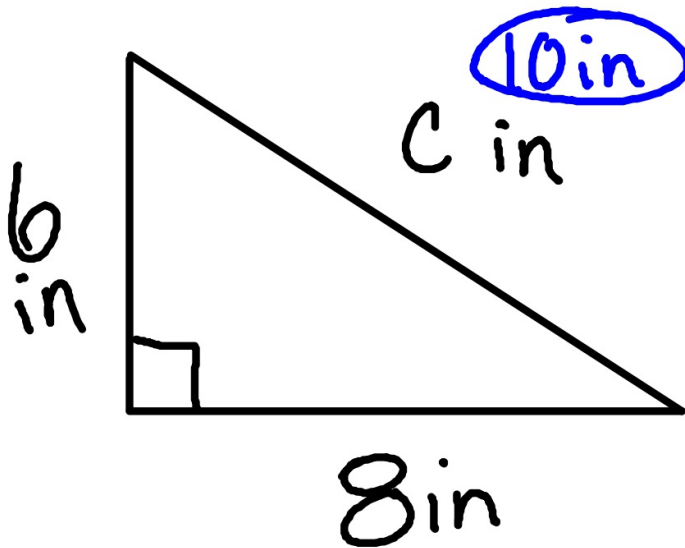


$$\text{leg}^2 + \text{leg}^2 = \text{hypotenuse}^2$$



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

where a, b = legs
c = hypotenuse



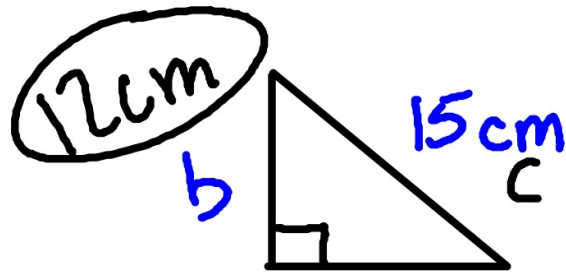
$$a^2 + b^2 = c^2$$

$$6^2 + 8^2 = c^2$$

$$36 + 64 = c^2$$

$$\sqrt{100} = \sqrt{c^2}$$

$$10 = c$$



9cm

a

$$9^2 + b^2 = 15^2$$
$$81 + b^2 = 225$$
$$\sqrt{b^2} = \sqrt{144}$$
$$b = 12$$