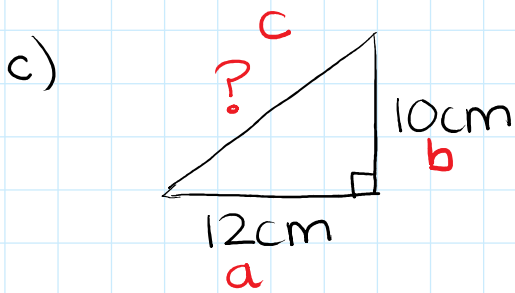
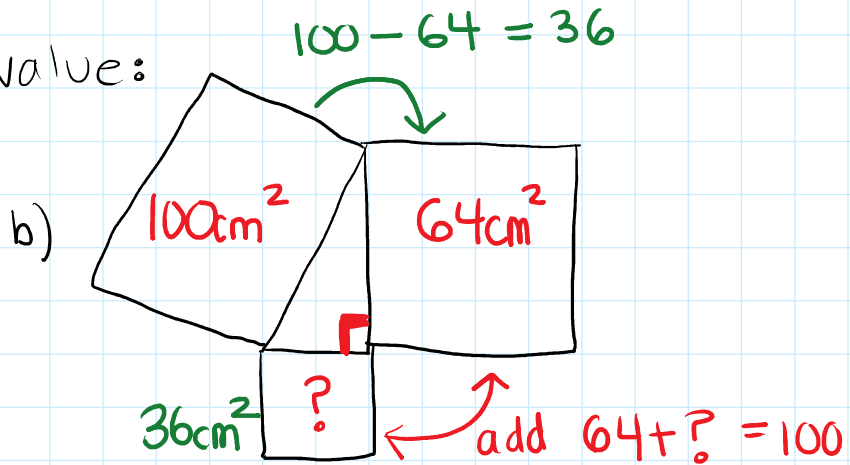
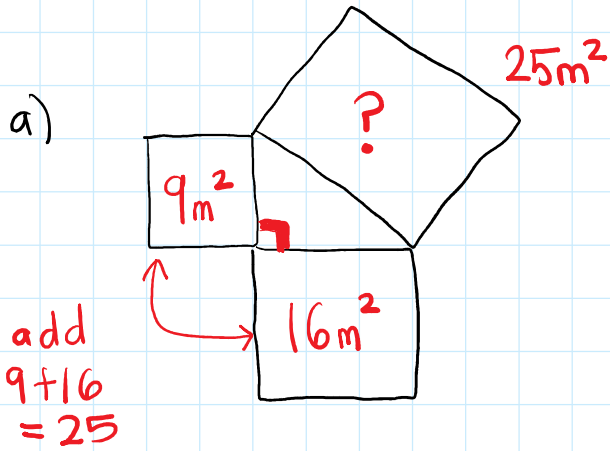


The Pythagorean Theorem (day 2)

December 12, 2016 8:37 AM

1. solve for the missing value:



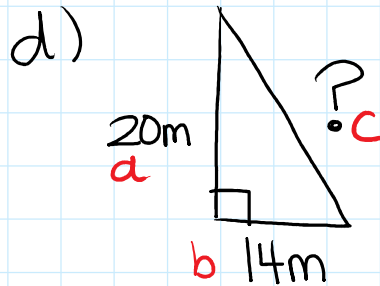
$$a^2 + b^2 = c^2$$

$$(12cm)^2 + (10cm)^2 = c^2$$

$$144cm^2 + 100cm^2 = c^2$$

$$\sqrt{244cm^2} = \sqrt{c^2}$$

$$c = 15.6cm$$

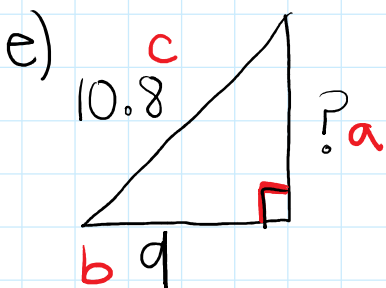


$$(20m)^2 + (14m)^2 = c^2$$

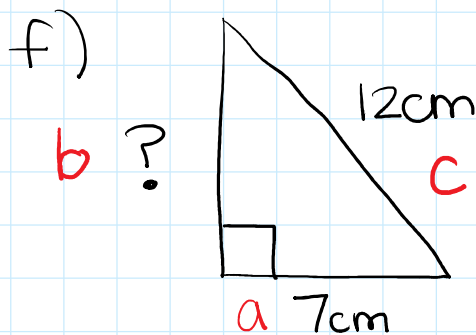
$$400m^2 + 196m^2 = c^2$$

$$\sqrt{596m^2} = \sqrt{c^2}$$

$$24.4m = c$$



$$a^2 + b^2 = 10.8^2$$



$$a^2 + 9^2 = 10.8^2$$

$$a^2 + \cancel{81} = 116.64$$
$$- \cancel{81} \quad -81$$

$$\sqrt{a^2} = \sqrt{35.64}$$

$$a = \overset{6.0}{5.969} = 6.0$$

↑
up

a 7cm

$$(7\text{cm})^2 + b^2 = (12\text{cm})^2$$

$$49\text{cm}^2 + b^2 = 144\text{cm}^2$$
$$-49\text{cm}^2 \quad -49\text{cm}^2$$
$$\sqrt{b^2} = \sqrt{95\text{cm}^2}$$

$$b = 9.7\text{cm}$$