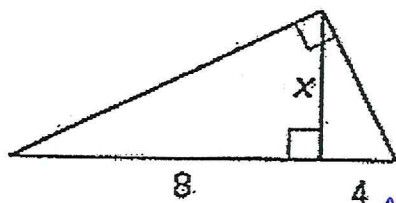


I can use relationships in similar right triangles to find a missing side.

Sec 7.4 Corollaries



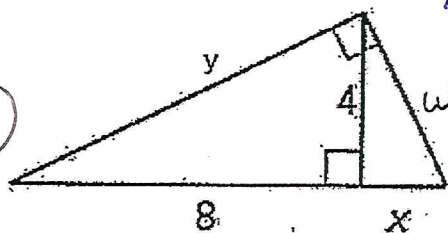
x is an altitude

$$\frac{8}{x} = \frac{x}{4}$$

$$x^2 = 32$$

$$x = \sqrt{32} \xrightarrow{16} 2$$

$$x = 4\sqrt{2}$$



x = hypot piece

$y + w = \text{legs}$

$$\frac{8}{y} = \frac{y}{x}$$

$$8x = 16$$

$$x = 2$$

$$\frac{8}{y} = \frac{y}{8+2}$$

$$\frac{8}{y} = \frac{y}{10}$$

$$y^2 = 80$$

$$y = \sqrt{80} \xrightarrow{16} 5$$

$$y = 4\sqrt{5}$$

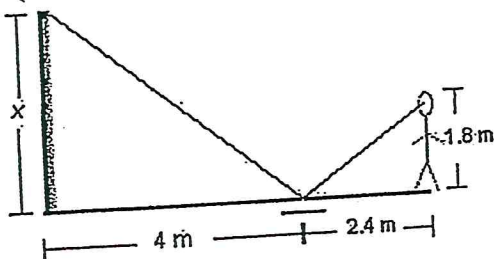
$$\frac{2}{w} = \frac{w}{10}$$

$$w^2 = 20$$

$$w = \sqrt{20} \xrightarrow{4} 5$$

$$w = 2\sqrt{5}$$

Ramon places a mirror on the ground 4 m from the base of a geyser. He walks backward 2.4 m until he can see the top of the geyser in the mirror. At this point Ramon's eyes are 1.8 m above the ground. Find the height of the geyser.



$$\frac{x}{4} = \frac{1.8}{2.4}$$

$$\frac{2.4x}{2.4} = \frac{7.2}{2.4}$$

$$x = 3 \text{ m}$$

NOT on
here

1. $\Delta \angle$ Bisector
2. Geo means w/ just #'s
3. The part
4. Props of proportions