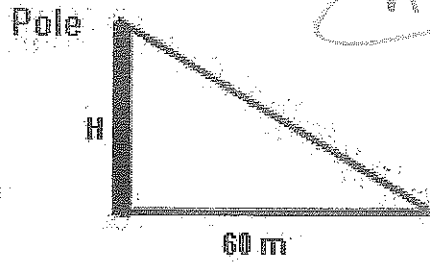
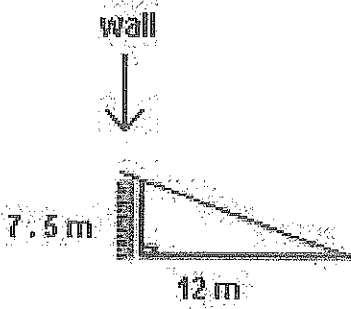
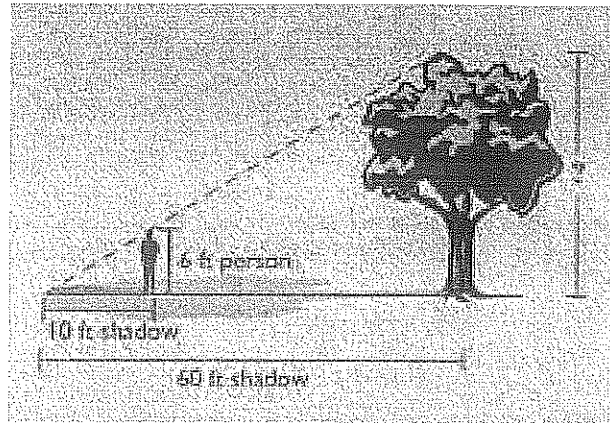


$$\frac{36 \times 7}{60} = 4.2$$

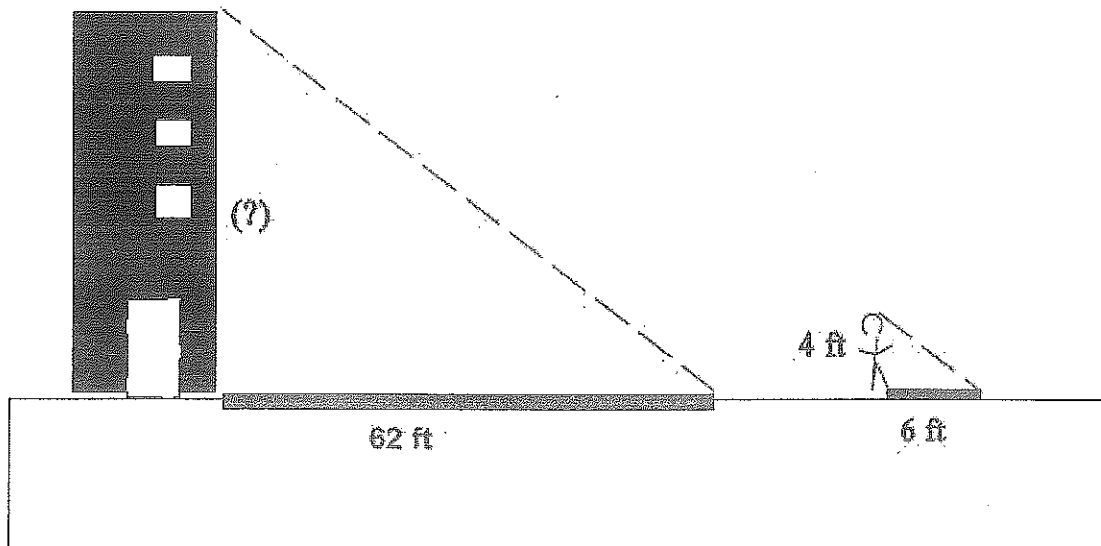
$$\frac{36 \times 10}{60} = 6$$



$$h = 37.5 \text{ m}$$

$$\frac{h}{60 \text{ m}} = \frac{7.5 \text{ m}}{12}$$

A building casts a 62 ft shadow. A 4 foot tall boy standing near the building casts a shadow 6 ft in length. Using similar triangles, determine the height of the building.



The two triangles illustrated are similar.

$$\frac{41\frac{1}{3} \text{ ft}}{62 \text{ ft}} = \frac{4 \text{ ft}}{6 \text{ ft}}$$

$$\frac{62 \text{ ft}}{6 \text{ ft}} = \frac{4 \text{ ft}}{x}$$

x ft.

4 ft, 10 in

125 ft.

5.5 ft.

$$\frac{x}{1500} = \frac{58}{66}$$

$x \approx 109.8$ ft

h

24 ft

3 ft

6 ft

yardstick

12 ft

x

24

$\leftarrow 6$

$\times 4$