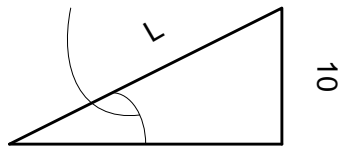


angle of elevation



Angle of elevation = $\alpha = 25^\circ$, vertical rise = $H = 10$ feet

Solution:

$$\sin \alpha = \frac{H}{L}$$

$$L = \frac{H}{\sin \alpha} = \frac{10}{\sin 25^\circ} = 23.6 \text{ feet}$$

Answer: 23.6 feet