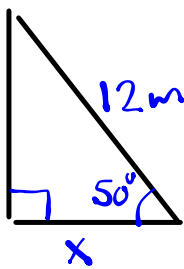


Solve for x

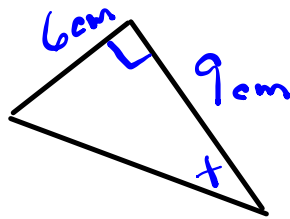


$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\cos 50^\circ = \frac{x}{12}$$

$$x = 12 \cos 50^\circ$$

$$= 8 \text{ m}$$



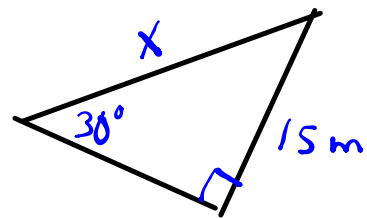
$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$\tan x = \frac{6}{9}$$

$$x = \tan^{-1}(6/9)$$

$$= 34^\circ$$

SOH CAH TOA



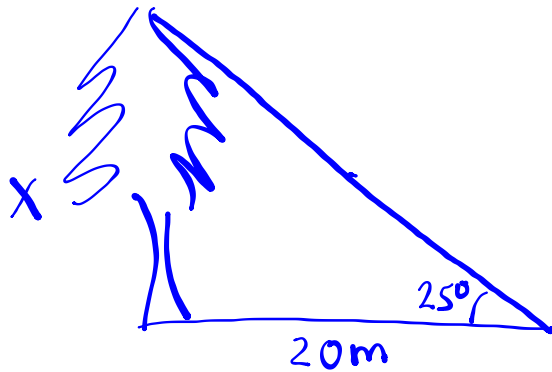
$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\sin 30^\circ = \frac{15}{x}$$

$$\frac{x \sin 30^\circ}{\sin 30^\circ} = \frac{15}{\sin 30^\circ}$$

$$x = 30 \text{ m}$$

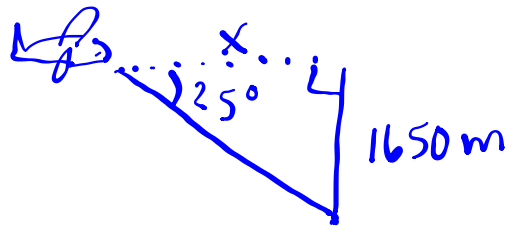
Life examples...



$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$\tan 25^\circ = \frac{x}{20}$$

$$x = 20 \cdot \tan 25^\circ \\ = 9.33 \text{ m}$$



$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

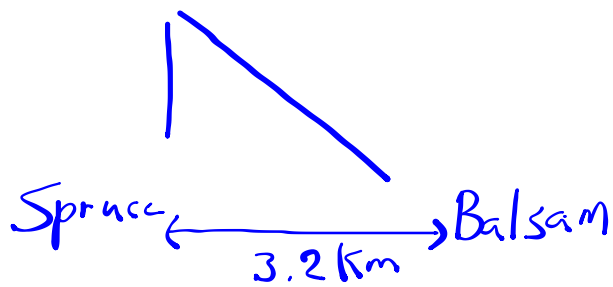
$$\tan 25^\circ = \frac{1650}{x}$$

$$\cancel{x} \tan 25^\circ = \frac{1650}{\cancel{\tan 25^\circ}}$$

$$x = 3538.44 \text{ m}$$

Sheet

5. Pine



Homework...worksheets