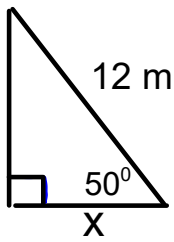


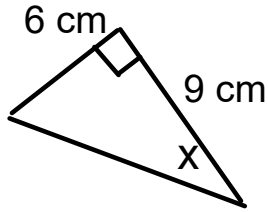
Solve for x



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

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

$$x = 12 \cos 50^\circ = 7.7 \text{ m}$$

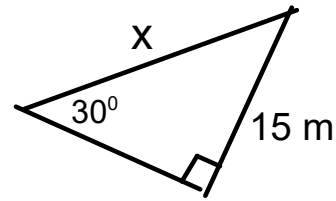


$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

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

$$x = \tan^{-1}(6/9) = 34^\circ$$

SOH CAH TOA



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

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

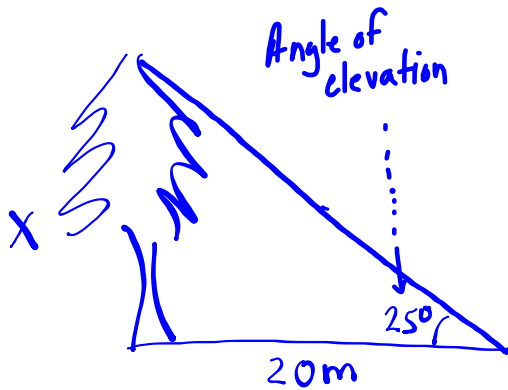
$$\frac{\sin 30^\circ x}{\sin 30^\circ} = \frac{15}{\sin 30^\circ}$$

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

May 3-8:30 AM

Life examples... SOH CAH TOA

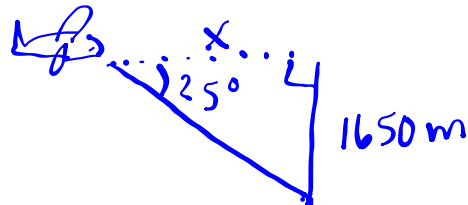
Angle of depression



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

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

$$x = 20 \tan 25^\circ = 9.3 \text{ m}$$



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

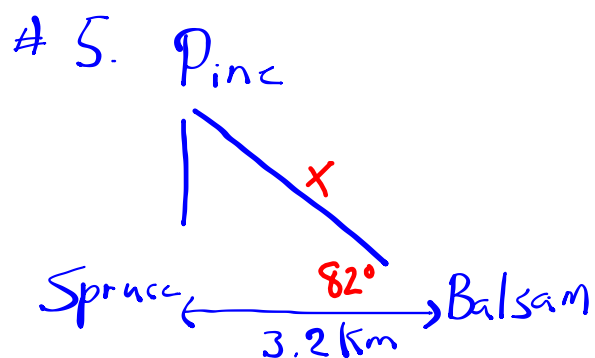
$$\tan 25^\circ = \frac{1650}{x}$$

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

$$x = 3538.4 \text{ m}$$

May 3-8:50 AM

Sheet



Homework...worksheets

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

$$\cos 82^\circ = \frac{3.2}{x}$$

$$\frac{x \cos 82^\circ}{\cos 82} = \frac{3.2}{\cos 82}$$

$$x = \frac{3.2}{\cos 82}$$

$$= 23 \text{ km}$$

May 3-8:59 AM