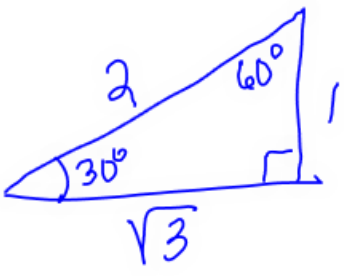
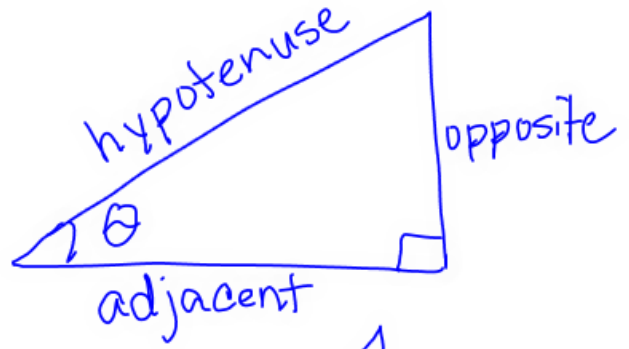
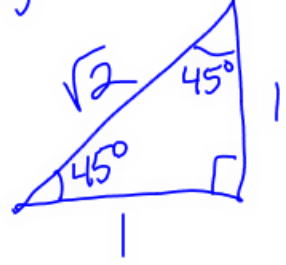


sine  $\sin \theta = \frac{\text{opp}}{\text{hyp}}$   
 cosine  $\cos \theta = \frac{\text{adj}}{\text{hyp}}$   
 tangent  $\tan \theta = \frac{\text{opp}}{\text{adj}} = \frac{\sin \theta}{\cos \theta}$



$$\begin{aligned}
 1^2 + 1^2 &= c^2 \\
 1 + 1 &= c^2 \\
 2 &= c^2 \\
 \pm\sqrt{2} &= c
 \end{aligned}$$



$$\sin 30^\circ = \frac{1}{2}$$

$$\sin 60^\circ = \frac{\sqrt{3}}{2}$$

$$\sin 45^\circ = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$\cos 30^\circ = \frac{\sqrt{3}}{2}$$

$$\cos 60^\circ = \frac{1}{2}$$

$$\cos 45^\circ = \frac{\sqrt{2}}{2}$$

$$\tan 30^\circ = \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{3}$$

$$\tan 60^\circ = \sqrt{3}$$

$$\tan 45^\circ = 1$$

$(\cos \theta, \sin \theta) \tan$

