

Positive Trig Ratios:

<u>Students</u>	All
<u>Take</u>	<u>Calculus</u>

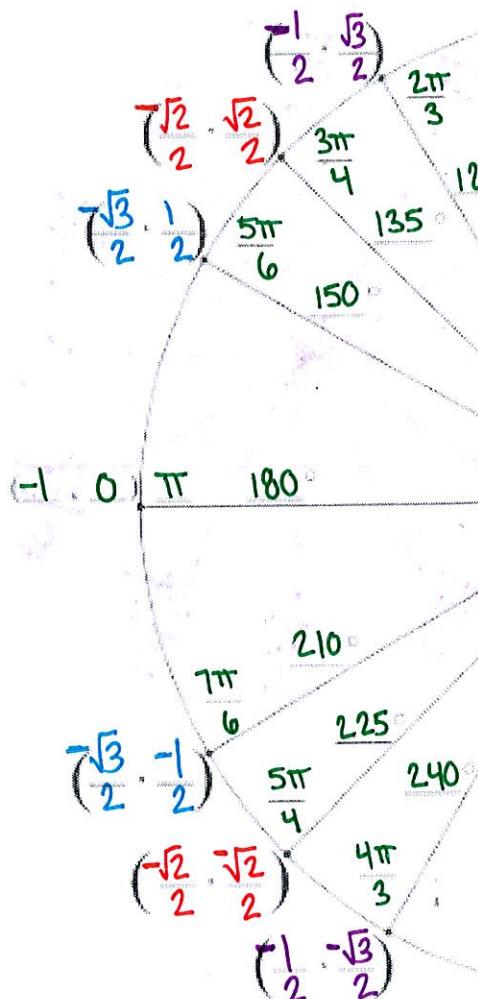
(x, y)

(cosθ, sinθ)

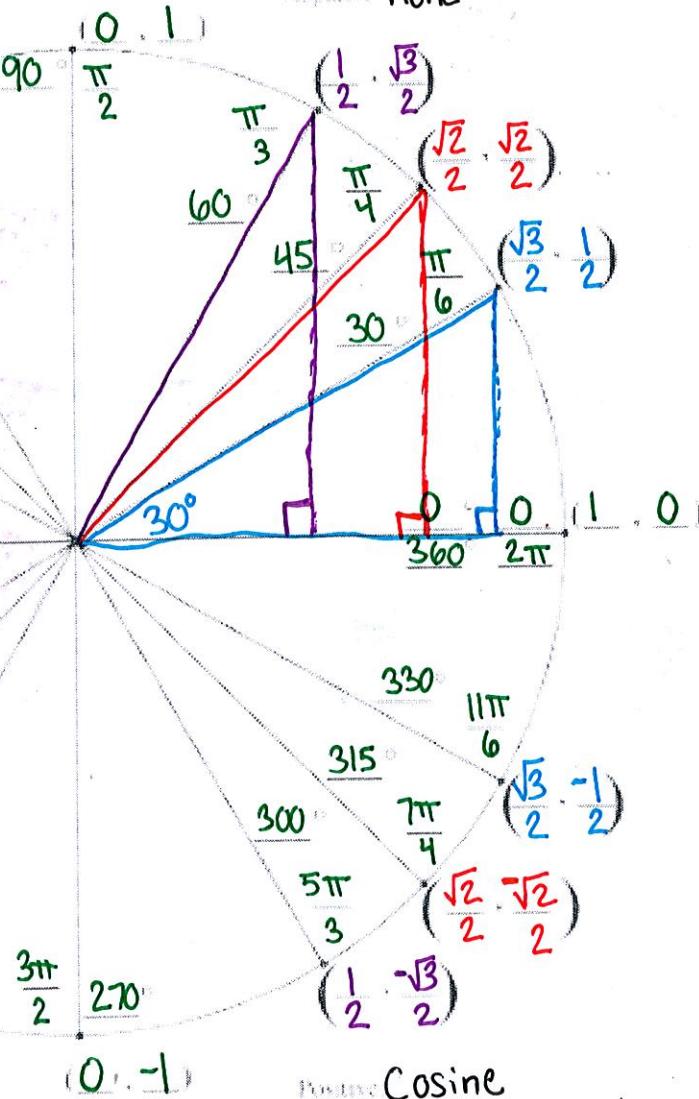
$$\tan\theta = \frac{\sin\theta}{\cos\theta}$$

Fill in The Unit Circle

Sine
Positive
Negative
Cosine, tangent

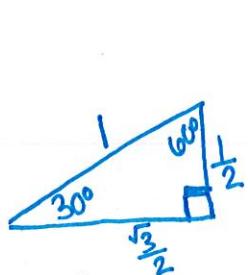


Positive All
Negative none



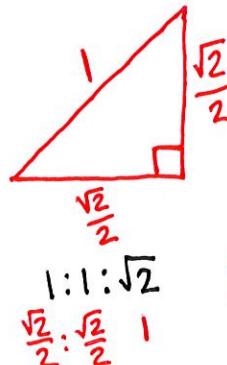
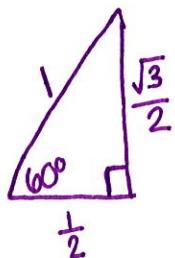
Tangent
Positive
Negative
Sine, Cosine

Cosine
Positive
Negative
Sine, tangent



$$1 : \sqrt{3} : 2$$

$$\frac{1}{2} : \frac{\sqrt{3}}{2} : 1$$



$$1 : 1 : \sqrt{2}$$

$$\frac{\sqrt{2}}{2} : \frac{\sqrt{2}}{2} : 1$$

$$\frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$\sin 30^\circ = \frac{\frac{1}{2}}{1} = \frac{1}{2} \quad \cos 30^\circ = \frac{\frac{\sqrt{3}}{2}}{1} = \frac{\sqrt{3}}{2}$$

$$\sin 60^\circ = \frac{\frac{\sqrt{3}}{2}}{1} = \frac{\sqrt{3}}{2} \quad \cos 60^\circ = \frac{\frac{1}{2}}{1} = \frac{1}{2}$$

$$\tan 30^\circ = \frac{\frac{1}{2}}{\frac{\sqrt{3}}{2}} = \frac{1}{2} \cdot \frac{2}{\sqrt{3}} = \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{3}$$