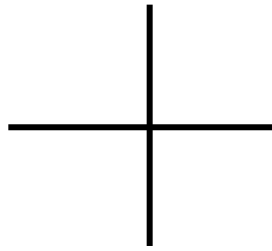
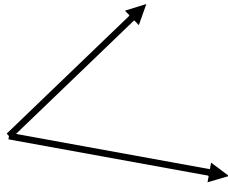
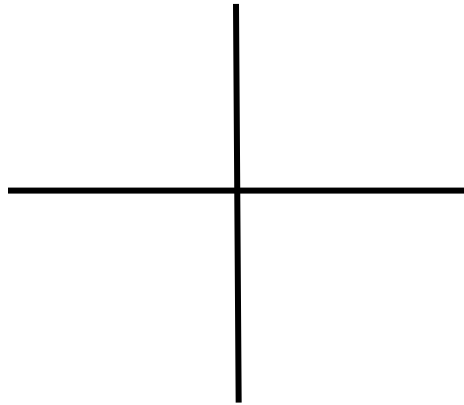


Angles/Standard Position



Standard position:

- 1.
- 2.



- _____ - your values are positive.
- _____ - your values are negative.

Finding angle measures:

- You can keep going around the unit circle more and more times.

<p>Ex. 1</p>	<p>Ex. 2</p>	<p>Ex. 3</p>	<p>Ex. 4</p>
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Sketching & Determining the Quadrant of the Terminal Side of each Angle:

<p>Ex. 5</p> <p>Angle: -85° Quadrant: _____</p>	<p>Ex. 6</p> <p>Angle: 150° Quadrant: _____</p>	<p>Ex. 7</p> <p>Angle: $\frac{\pi}{6}$ Quadrant: _____</p>	<p>Ex. 8</p> <p>Angle: $-\frac{5\pi}{4}$ Quadrant: _____</p>
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Finding Coterminals: Add and subtract 360° or 2π

$217^\circ = \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$

$\frac{3}{4}\pi = \underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$

Converting Between Radians \leftrightarrow Degrees

Degrees=180 \leftrightarrow Radians= π

Degrees=360 \leftrightarrow Radians=_____

Degrees=90 \leftrightarrow Radians=_____

Degrees=270 \leftrightarrow Radians=_____

Degrees \rightarrow Radians (mult. by $\frac{\pi}{180}$)

Radians \rightarrow Degrees (mult. by $\frac{180}{\pi}$)

Convert Each:

Ex. 9

$900^\circ \Rightarrow \text{radians}$

Ex. 10

$-32^\circ \Rightarrow \text{radians}$

Ex. 11

$\frac{11\pi}{15} \Rightarrow \text{degrees}$

Ex. 12

$-\frac{21\pi}{4} \Rightarrow \text{degrees}$

Arc Length: To find the measure of the length of an arc: $s = r\theta$ S = arc length; r = radius; θ = angle measure **in radians**

Ex 1: $\frac{\pi}{4}; r = 3m$

Ex 2: $\frac{7\pi}{6}; r = 2.1yds$

Ex. 3: $140^\circ; r = 11.1cm$

Ex 4: A circle has a radius of 4 inches. Find the length of an arc intercepted by a central angle of 240°