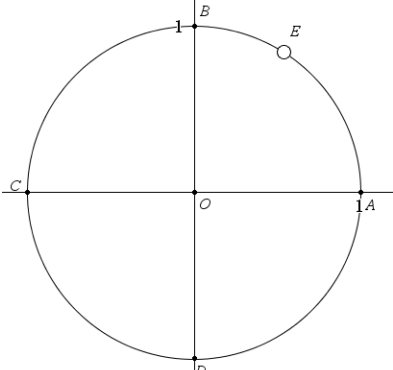
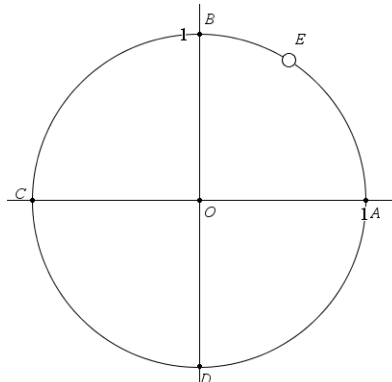


Angles in Trigonometry Guided Notes 1

<p>What is a radian?</p>	 <p>Draw the radius OE</p>
<p>What is the approximate degree measure of a radian?</p>	<p>Shade the arc EA</p>

<p>How do you convert degrees to radians?</p>	<p>How do you convert radians to degrees?</p>
<p>What is the difference between exact radian measure and approximate radian measure?</p>	<p>Explain the difference between 1 radian and 1π radians</p> 

It is suggested that each of these exact radian measurements' conversion to degrees is important enough to commit to memory

Exact Radian Measure								
0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{2\pi}{3}$	$\frac{3\pi}{4}$	$\frac{5\pi}{6}$	π
Degree Measure								
Exact Radian Measure								
π	$\frac{7\pi}{6}$	$\frac{5\pi}{4}$	$\frac{4\pi}{3}$	$\frac{3\pi}{2}$	$\frac{5\pi}{3}$	$\frac{7\pi}{4}$	$\frac{11\pi}{6}$	2π
Degree Measure								

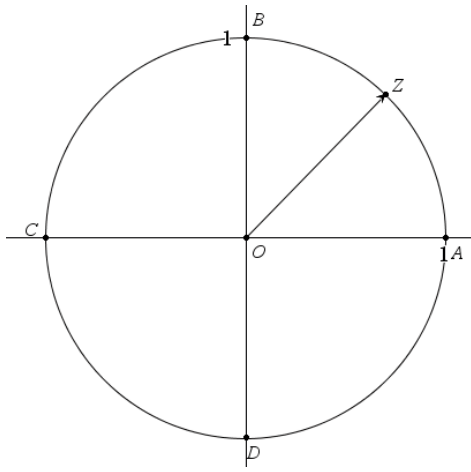
Counting by $\frac{\pi}{6}$ radians is like counting by _____ degrees

Counting by $\frac{\pi}{4}$ radians is like counting by _____ degrees

Counting by $\frac{\pi}{3}$ radians is like counting by _____ degrees

Counting by $\frac{\pi}{2}$ radians is like counting by _____ degrees

Counting by π radians is like counting by _____ degrees



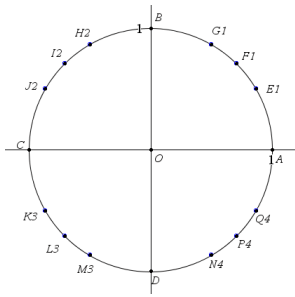
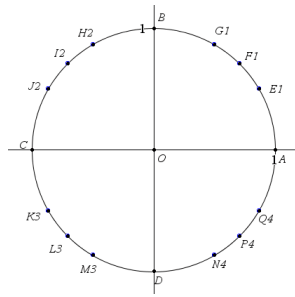
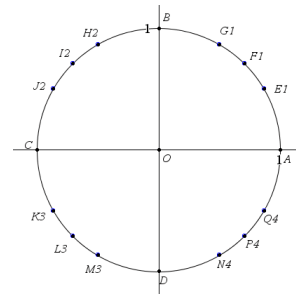
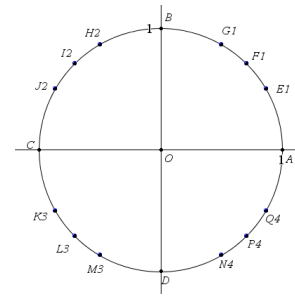
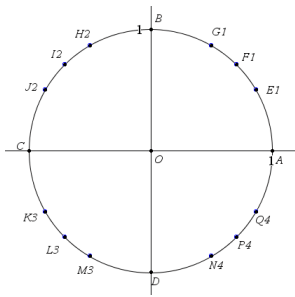
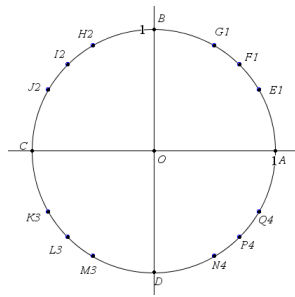
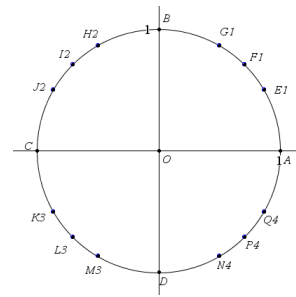
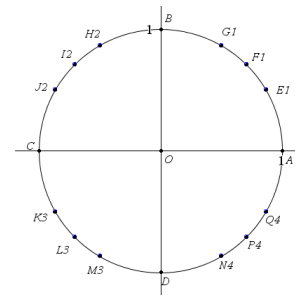
If we measure an angle using positive measurements then the initial side of the angle is _____ (name segment) and the angle is measured from this initial side by measuring the angle in a _____ manner (clockwise or counterclockwise)

If we measure an angle using negative measurements then the initial side of the angle is _____ (name segment) and the angle is measured from this initial side by measuring the angle in a _____ manner (clockwise or counterclockwise)

<p align="center">Sketch 30°</p> <p>State the equivalent negative angle measurement</p>	<p align="center">Sketch 45°</p> <p>State the equivalent negative angle measurement</p>	<p align="center">Sketch 60°</p> <p>State the equivalent negative angle measurement</p>	<p align="center">Sketch 90°</p> <p>State the equivalent negative angle measurement</p>
<p align="center">Sketch -30°</p> <p>State the equivalent positive angle measurement</p>	<p align="center">Sketch -45°</p> <p>State the equivalent positive angle measurement</p>	<p align="center">Sketch -60°</p> <p>State the equivalent positive angle measurement</p>	<p align="center">Sketch -90°</p> <p>State the equivalent positive angle measurement</p>

<p>State how to convert positive degree measurement to negative degree measurement</p>	<p>State how to convert negative degree measurement to positive degree measurement</p>
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Angles in Trigonometry Guided Notes 2

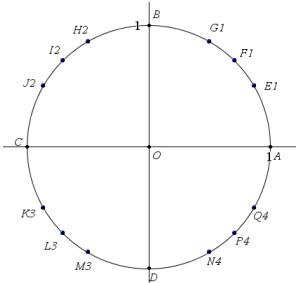
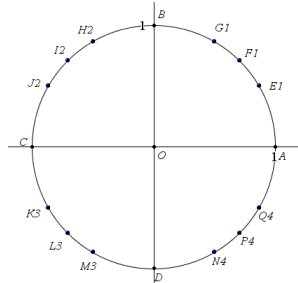
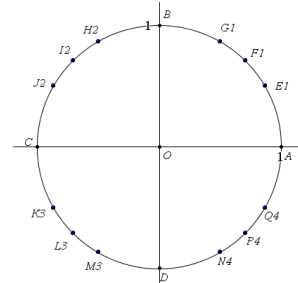
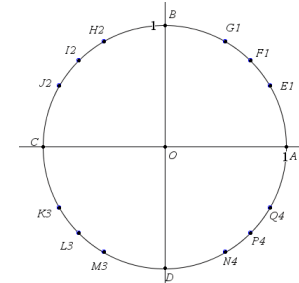
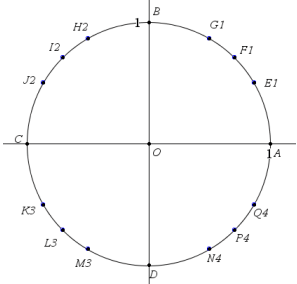
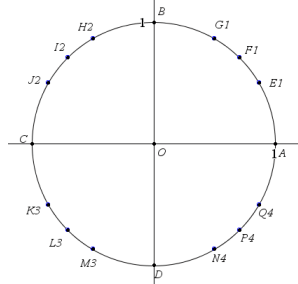
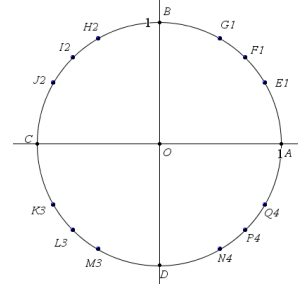
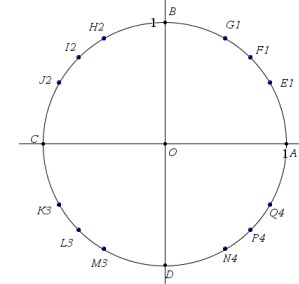
<p>Sketch $\frac{7\pi}{6}$ radians</p>  <p>State the equivalent negative exact radian measurement</p>	<p>Sketch $\frac{5\pi}{4}$ radians</p>  <p>State the equivalent negative exact radian measurement</p>	<p>Sketch $\frac{4\pi}{3}$ radians</p>  <p>State the equivalent negative exact radian measurement</p>	<p>Sketch $\frac{3\pi}{2}$ radians</p>  <p>State the equivalent negative exact radian measurement</p>
<p>Sketch $-\frac{2\pi}{3}$ radians</p>  <p>State the equivalent positive exact radian measurement</p>	<p>Sketch $-\frac{3\pi}{4}$ radians</p>  <p>State the equivalent positive exact radian measurement</p>	<p>Sketch $-\frac{5\pi}{6}$ radians</p>  <p>State the equivalent positive exact radian measurement</p>	<p>Sketch $-\frac{11\pi}{6}$ radians</p>  <p>State the equivalent positive exact radian measurement</p>
<p>State how to convert positive exact radian measurement to negative exact radian measurement</p>	<p>State how to convert negative exact radian measurement to positive exact radian measurement</p>		
<p>What do you do to sketch angles that have a measurement that is greater than 360°?</p>	<p>What do you do to sketch angles that have a measurement that is less than -360°?</p>		
<p>What do you do to sketch angles that have a measurement that is greater than 2π radians?</p>	<p>What do you do to sketch angles that have a measurement that is less than -2π radians?</p>		

State the degree measurements related to the first six rotations of a circle						Write a formula will give you the total number of rotations if angle measure represents degrees
1 rotation	2 rotations	3 rotations	4 rotations	5 rotations	6 rotations	
State the radian measurements related to the first six rotations of a circle						Write a formula will give you the total number of rotations if angle measure represents radians
1 rotation	2 rotations	3 rotations	4 rotations	5 rotations	6 rotations	

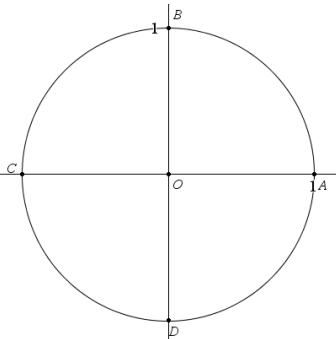
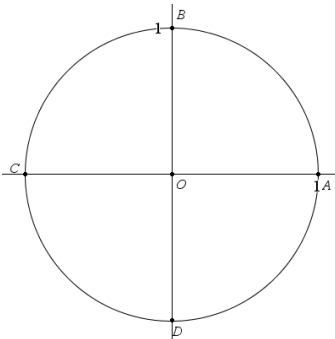
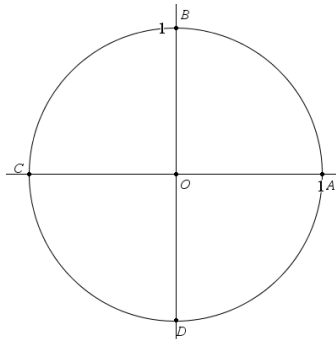
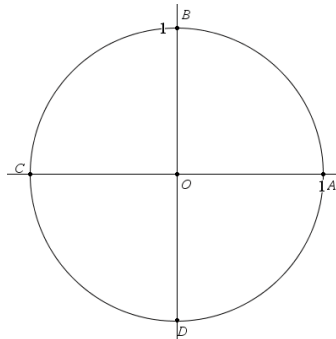
How do you convert a positive angle greater than 360° to its smallest positive coterminal angle that you can plot?	How do you convert a positive angle greater than 360° to the negative angle that is closest to 0° that you can plot?	How do you convert a positive angle greater than 360° to its number of revolutions?

<p>Sketch 780°</p>	<p>Sketch 1440°</p>	<p>Sketch 2205°</p>	<p>Sketch 18030°</p>
State the smallest equivalent positive coterminal angle	State the smallest equivalent positive coterminal angle	State the smallest equivalent positive coterminal angle	State the smallest equivalent positive coterminal angle
State the equivalent negative coterminal angle measurement closest to 0°	State the equivalent negative coterminal angle measurement closest to 0°	State the equivalent negative coterminal angle measurement closest to 0°	State the equivalent negative coterminal angle measurement closest to 0°
State the number of revolutions related to this angle measurement	State the number of revolutions related to this angle measurement	State the number of revolutions related to this angle measurement	State the number of revolutions related to this angle measurement

Angles in Trigonometry Guided Notes 3

<p>Sketch -840°</p> 	<p>Sketch -1920°</p> 	<p>Sketch -900°</p> 	<p>Sketch -36135°</p> 
<p>State the smallest equivalent positive coterminal angle</p>	<p>State the smallest equivalent positive coterminal angle</p>	<p>State the smallest equivalent positive coterminal angle</p>	<p>State the smallest equivalent positive coterminal angle</p>
<p>State the equivalent negative coterminal angle measurement closest to 0°</p>	<p>State the equivalent negative coterminal angle measurement closest to 0°</p>	<p>State the equivalent negative coterminal angle measurement closest to 0°</p>	<p>State the equivalent negative coterminal angle measurement closest to 0°</p>
<p>State the number of revolutions related to this angle measurement</p>	<p>State the number of revolutions related to this angle measurement</p>	<p>State the number of revolutions related to this angle measurement</p>	<p>State the number of revolutions related to this angle measurement</p>
<p>Sketch $\frac{73\pi}{6}$ radians</p> 	<p>Sketch $\frac{-73\pi}{4}$ radians</p> 	<p>Sketch $\frac{1003\pi}{2}$ radians</p> 	<p>Sketch $\frac{-91004\pi}{3}$ radians</p> 
<p>State the smallest equivalent positive coterminal angle</p>	<p>State the smallest equivalent positive coterminal angle</p>	<p>State the smallest equivalent positive coterminal angle</p>	<p>State the smallest equivalent positive coterminal angle</p>
<p>State the equivalent negative coterminal angle measurement closest to 0 radians</p>	<p>State the equivalent negative coterminal angle measurement closest to 0 radians</p>	<p>State the equivalent negative coterminal angle measurement closest to 0 radians</p>	<p>State the equivalent negative coterminal angle measurement closest to 0 radians</p>
<p>State the number of revolutions related to this angle measurement</p>	<p>State the number of revolutions related to this angle measurement</p>	<p>State the number of revolutions related to this angle measurement</p>	<p>State the number of revolutions related to this angle measurement</p>
<p>How do you convert a positive angle greater than 2π radians to its smallest positive coterminal angle that you can plot?</p>	<p>How do you convert a positive angle greater than 2π radians to the negative angle that is closest to 0 radians that you can plot?</p>		<p>How do you convert a positive angle greater than 2π radians to its number of revolutions?</p>

State the four quadrantal angles in mathematics in degrees and radians

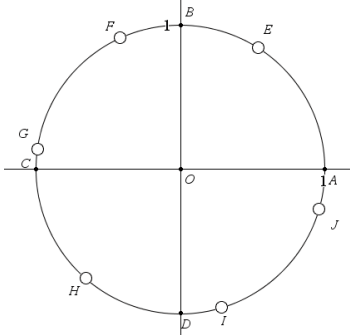
Quadrantal Angle between Q1 and Q4	Quadrantal Angle between Q1 and Q2	Quadrantal Angle between Q2 and Q3	Quadrantal Angle between Q3 and Q4
			
State using degrees	State using positive degrees	State using positive degrees	State using positive degrees
State using radians	State using positive and exact radians	State using positive and exact radians	State using positive and exact radians
State using approximate radians NOT APPLICABLE	State using approximate radians (round to two decimals)	State using approximate radians (round to two decimals)	State using approximate radians (round to two decimals)
State using negative degrees NOT APPLICABLE	State using negative degrees	State using negative degrees	State using negative degrees
State using negative radians NOT APPLICABLE	State using negative and exact radians	State using negative and exact radians	State using negative and exact radians
State using approximate radians NOT APPLICABLE	State using approximate radians (round to two decimals)	State using approximate radians (round to two decimals)	State using approximate radians (round to two decimals)

<p>What is the difference between DMS notation and decimal degree notation?</p>	
<p>How do you use a TI Nspire to convert decimal degrees to DMS?</p>	<p>How do you use a TI Nspire to convert DMS to decimal degrees?</p>

Angles in Trigonometry Guided Notes 4

Radian Measurements

1 radian

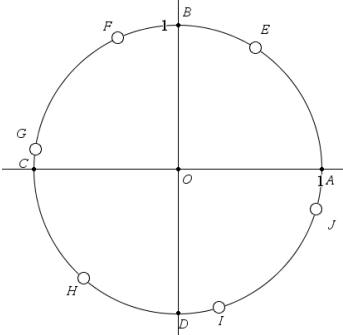


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using negative radians
(round to two decimals)

2 radians

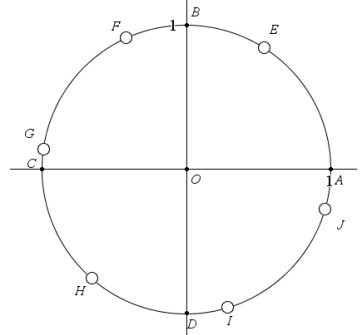


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using negative radians
(round to two decimals)

3 radians

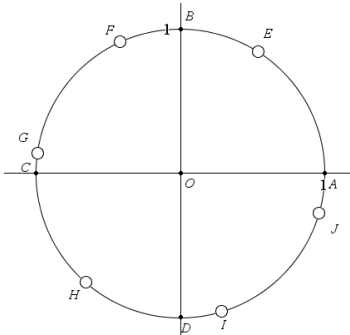


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using negative radians
(round to two decimals)

4 radians

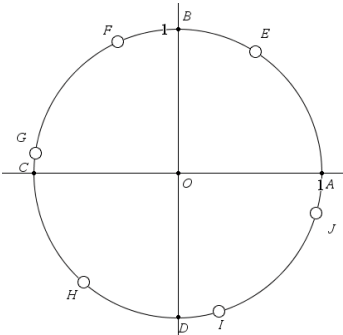


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using negative radians
(round to two decimals)

5 radians

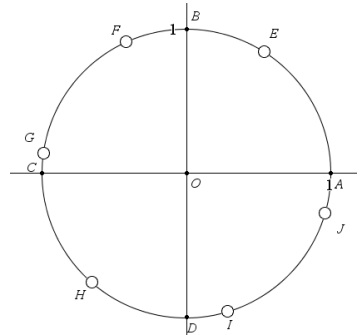


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using negative radians
(round to two decimals)

6 radians



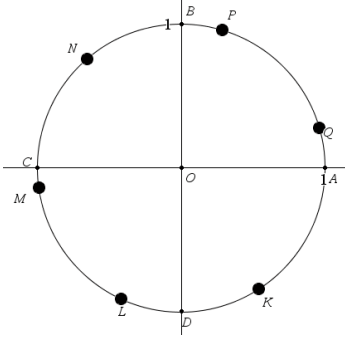
State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using negative radians
(round to two decimals)

Radian Measurements

-1 radian

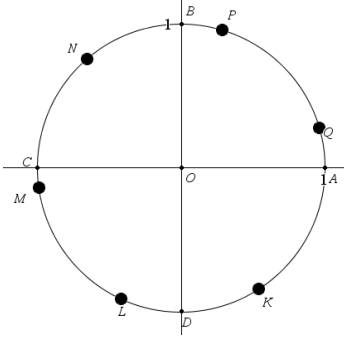


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using positive radians
(round to two decimals)

-2 radians

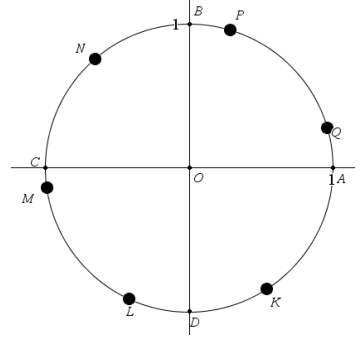


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using positive radians
(round to two decimals)

-3 radians

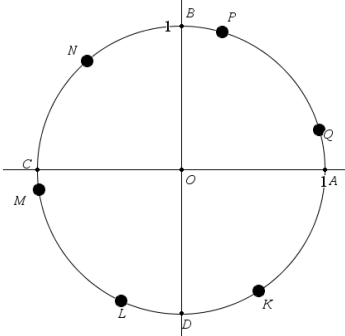


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using positive radians
(round to two decimals)

-4 radians

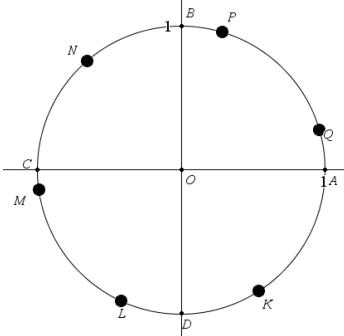


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using positive radians
(round to two decimals)

-5 radians

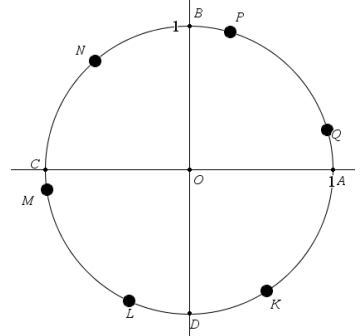


State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using positive radians
(round to two decimals)

-6 radians



State using positive degrees
(round to two decimals)

State using negative degrees
(round to two decimals)

State using positive radians
(round to two decimals)