

3.2A Radians

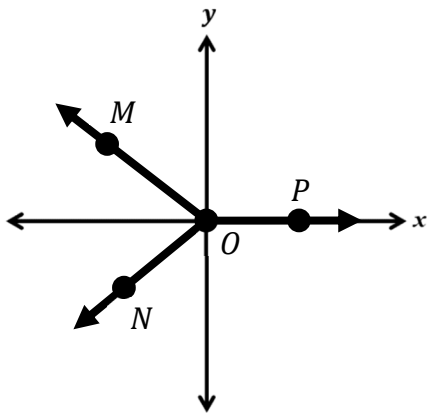
AP Precalculus

Name: _____

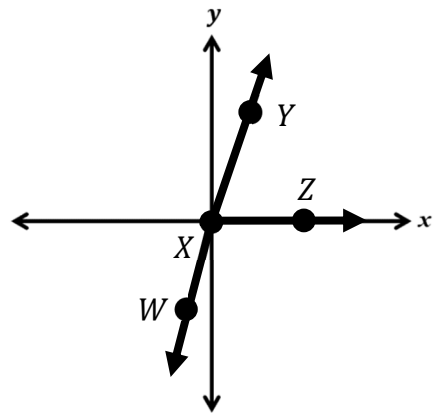
CA #1

For each set of axes, name all the angles that are in standard position. Give the initial ray and terminal ray of each angle.

1.



2.



The measurement of an angle in standard position is listed. In which quadrant is the terminal ray?

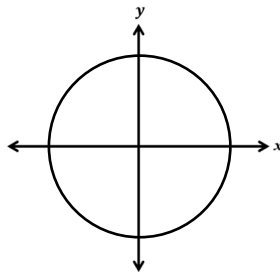
3. 4.6π

4. 7.3π

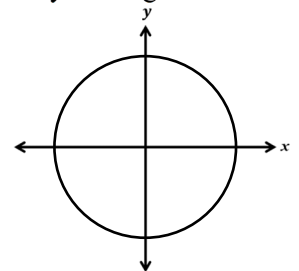
5. -5.6π

Below are various measurements of a circle's radius, an angle within the circle, or the arc subtended by the angle. SKETCH the approximate angle on the axes and find the missing value.

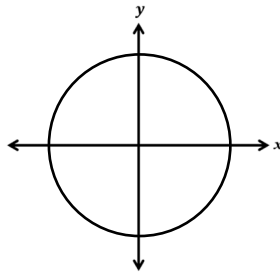
6. Radius is 9.71 and the length of an arc subtended by an angle is 16.9. Find the measure of the angle.



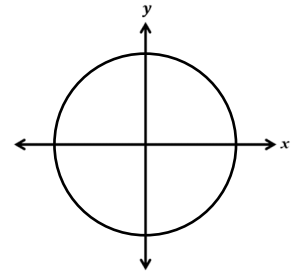
7. Radius is 9.63 and an angle is 0.98π radians. Find the length of the arc subtended by the angle.



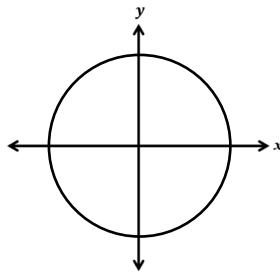
8. An angle is 1.4π radians and the length of an arc subtended by the angle is 15.8. What is the radius of the circle?



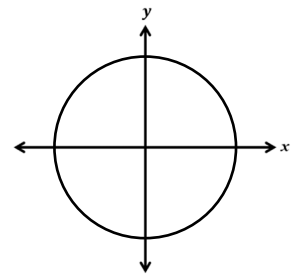
9. Radius is 4.31 and an angle is 4.47 radians. Find the length of the arc subtended by the angle.



10. An angle is 0.78 radians and the length of an arc subtended by the angle is 2.09. What is the radius of the circle?



11. Radius is 5.1 and the length of an arc subtended by an angle is 26. Find the measure of the angle.



Answers to 3.2A CA #1

1. Angle POM with initial ray \overrightarrow{OP} and terminal ray \overrightarrow{OM} Angle PON with initial ray \overrightarrow{OP} and terminal ray \overrightarrow{ON}		2. Angle ZXY with initial ray \overrightarrow{XZ} and terminal ray \overrightarrow{XY} Angle ZXW with initial ray \overrightarrow{XZ} and terminal ray \overrightarrow{XW}		
3. Quadrant II	4. Quadrant III	5. Quadrant I	6. 1.74 radians	7. 29.648
8. 3.592	9. 19.2657	10. 2.679	11. 5.098 radians	