

Name _____
Mr. Schlansky

Date _____
Pre Calculus



The Unit Circle

Find the exact value of the coordinate on the unit circle for each of the following

$$1. \theta = 30^\circ$$

$$2. \theta = \frac{\pi}{3}$$

$$3. \theta = 45^\circ$$

$$4. \theta = \frac{5\pi}{3}$$

$$5. \theta = 300^\circ$$

$$6. \theta = \frac{7\pi}{6}$$

$$7. \theta = 330^\circ$$

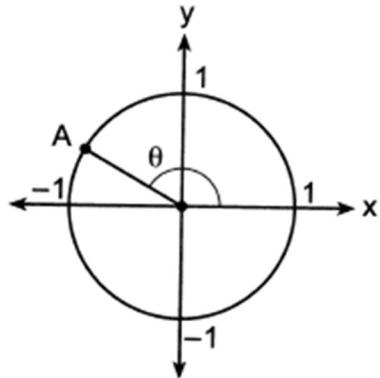
$$8. \theta = \frac{5\pi}{4}$$

$$9. \theta = 120^\circ$$

10. In the diagram of a unit circle below, point $A, \left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$, represents the point where the terminal side of θ intersects the unit circle.

What is $m\angle\theta$?

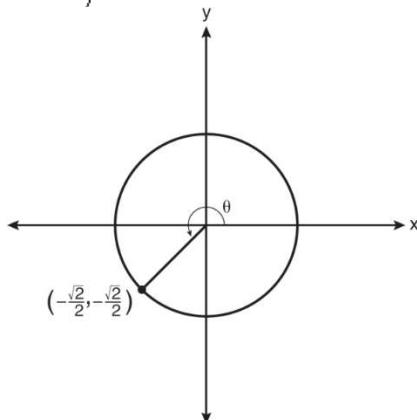
- 1) 30°
2) 120°
3) 135°
4) 150°



11. In the diagram below of a unit circle, the ordered pair $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$ represents the point where the terminal side of θ intersects the unit circle.

What is $m\angle\theta$?

- 1) $\frac{\pi}{4}$
2) $\frac{3\pi}{4}$
3) $\frac{5\pi}{4}$
4) $\frac{4\pi}{3}$



12. In the diagram of a unit circle below, a point on the unit circle has coordinates $\left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$.

What is $m\angle\theta$?

- 1) 300°
2) 315°
3) 240°
4) 330°

