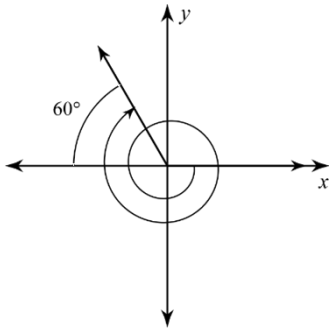
 Name: _____

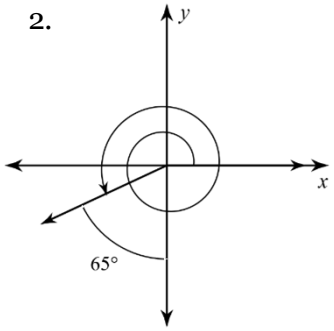
8.REV.1 - MID-Unit Review

For the angle shown: (a) Find its degree measure; (b) convert to radians; and (c) find the measure of a coterminal angle between 0° & 360°.

1.

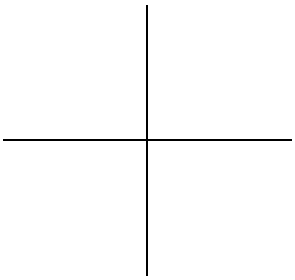


2.

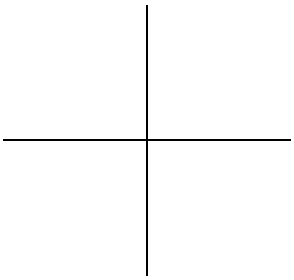


Sketch the angle in standard position. Then find the degree and radian measure.

3. Two-thirds counterclockwise rotation



4. One and three-fifths clockwise rotation



In order the answer the questions below, you may need to find a positive coterminal angle less than 360° and/or convert degrees into radians.

5. Which trig functions are positive for an angle measuring 280°?

6. Which trig functions are positive for an angle measuring 0.75π?

7. Which trig functions are positive for an angle measuring 927°?

8. Which trig functions are positive for an angle measuring -1.8π?

You are given the coordinates of a point on the terminal side of the angle θ (in standard position). Sketch the reference triangle in the proper quadrant and find the length of the third side. Then find the exact values of the indicated trig functions expressed in simplest form.

9. $(-1, 4)$

10. $\left(-5, -\sqrt{3}\right)$

$\sin\theta =$ $\sec\theta =$ $\csc\theta =$ $\cos\theta =$

You are given one trigonometric ratio and a description of its location. Sketch the reference triangle in the proper quadrant and find the length of the third side. Then find the exact values of the indicated trig functions expressed in simplest form.

11. $\sin\theta = \frac{3}{4};\ \frac{\pi}{2} < \theta < \pi$

$\tan\theta =$ $\sec\theta =$ $\cos\theta =$ $\csc\theta =$

12. $\cot\theta = -\frac{13}{9};\ \cos\theta > 0$

$\tan\theta =$ $\sec\theta =$ $\cos\theta =$ $\csc\theta =$

13. $\sec\theta = -\frac{9}{7};\ \pi < \theta < \frac{3\pi}{2}$

$\sin\theta =$ $\cot\theta =$ $\sec\theta =$ $\tan\theta =$

14. $\csc\theta = \frac{7}{3};\ \tan\theta < 0$

$\sin\theta =$ $\cot\theta =$ $\sec\theta =$ $\tan\theta =$

15. $\csc\theta = -\frac{\sqrt{30}}{5}, \cos\theta < 0$

$\cos\theta =$ $\tan\theta =$ $\sec\theta =$ $\csc\theta =$

16. $\tan\theta = -2\sqrt{2}, \sin\theta > 0$

$\cos\theta =$ $\tan\theta =$ $\sec\theta =$ $\csc\theta =$