

# Pre-Calculus

Name \_\_\_\_\_

Sections 4.1-4.4 Review

Find two coterminal angles (one positive and one negative) for each angle.

1.  $50^\circ$

2.  $\frac{3\pi}{5}$

If possible, find the complement and supplement for each angle.

3.  $110^\circ$

4.  $\frac{\pi}{5}$

Sketch the angles in standard position.

5.  $110^\circ$

6.  $-\frac{2\pi}{3}$

7.  $\frac{7\pi}{4}$

Convert each angle to radian measure.

8.  $36^\circ$

9.  $150^\circ$

10.  $-135^\circ$

Convert each angle to degree measure.

11.  $\frac{5\pi}{2}$

12.  $\frac{7\pi}{4}$

13.  $\frac{3\pi}{10}$

14. Find the area of the sector if  $\theta = 120^\circ$  and  $r = 10$  cm.

15. Find the length of the arc of a circle with radius 4 inches if  $\theta = 150^\circ$ .

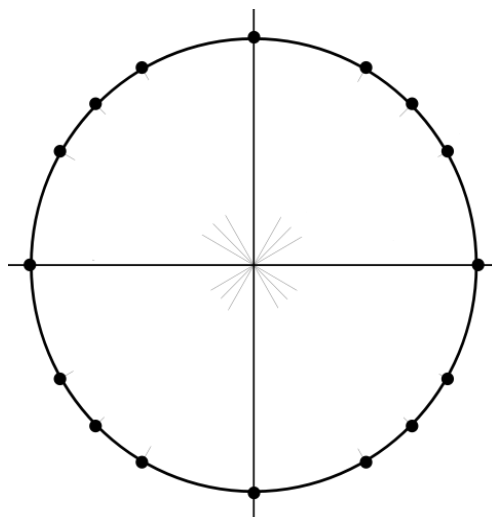
16. If  $\cos \theta = \frac{\sqrt{7}}{4}$ , use the trig identities to find the indicated trig functions.

a.  $\sin \theta$

b.  $\sin (90 - \theta)$

b.  $\tan \theta$

17. Fill out the unit circle in degree and radian measure.

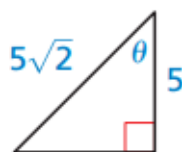


Evaluate the six trig functions for the triangles below.

18.



19.



20. Evaluate the six trig functions at  $t = \frac{11\pi}{6}$

21. Use a calculator to evaluate the following to three decimal places.

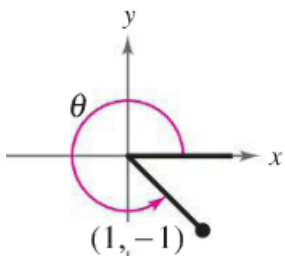
a.  $\csc 76^\circ$

b.  $\cos 240^\circ$

c.  $\sin \frac{11\pi}{5}$

d.  $\tan 2.2$

22. Determine the exact values of the six trig functions for angle  $\theta$ .



23. Fill out the table below.

$\theta$ (degrees)	$0^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$90^\circ$	$180^\circ$	$270^\circ$
$\theta$ (radians)							
$\sin \theta$							
$\cos \theta$							
$\tan \theta$							