

## 6-3 Unit Circle and Reciprocal Trig Functions

Period \_\_\_\_\_

**(6-3a) Find the exact value of each trigonometric ratio.**

1)  $\sin \frac{\pi}{2}$

2)  $\cos \frac{3\pi}{4}$

3)  $\tan \frac{\pi}{3}$

4)  $\tan \frac{5\pi}{6}$

5)  $\csc \frac{\pi}{3}$

6)  $\sec \frac{5\pi}{6}$

7)  $\cot \frac{\pi}{4}$

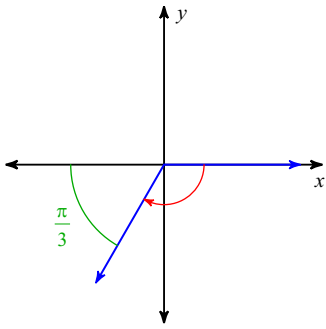
8)  $\csc \frac{\pi}{6}$

9)  $\tan -300^\circ$

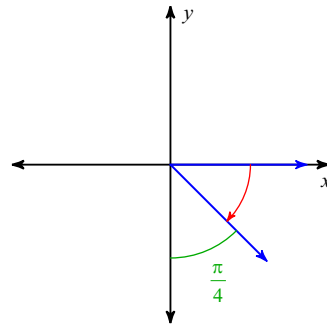
10)  $\sin 495^\circ$

(6-2a, 6-2b) Use the reference angle to find the missing angle, then find one positive and one negative coterminal angle.

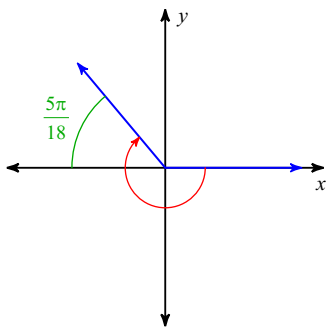
11)



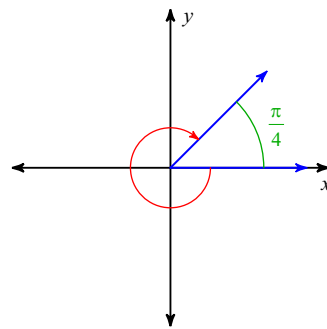
12)



13)



14)



## 6-3 Unit Circle and Reciprocal Trig Functions

Period \_\_\_\_\_

**(6-3a) Find the exact value of each trigonometric ratio.**

1)  $\sin \frac{\pi}{2}$

1

2)  $\cos \frac{3\pi}{4}$

 $-\frac{\sqrt{2}}{2}$ 

3)  $\tan \frac{\pi}{3}$

 $\sqrt{3}$ 

4)  $\tan \frac{5\pi}{6}$

 $-\frac{\sqrt{3}}{3}$ 

5)  $\csc \frac{\pi}{3}$

 $\frac{2\sqrt{3}}{3}$ 

6)  $\sec \frac{5\pi}{6}$

 $-\frac{2\sqrt{3}}{3}$ 

7)  $\cot \frac{\pi}{4}$

1

8)  $\csc \frac{\pi}{6}$

2

9)  $\tan -300^\circ$

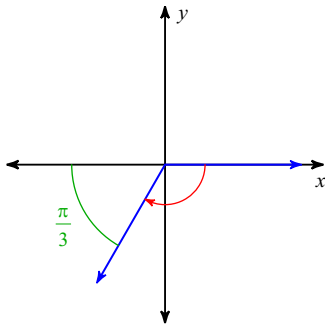
 $\sqrt{3}$ 

10)  $\sin 495^\circ$

 $\frac{\sqrt{2}}{2}$

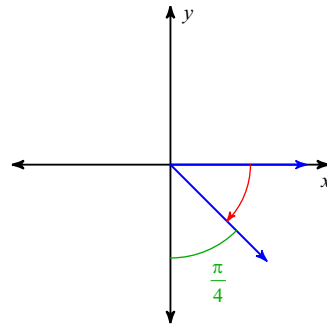
(6-2a, 6-2b) Use the reference angle to find the missing angle, then find one positive and one negative coterminal angle.

11)



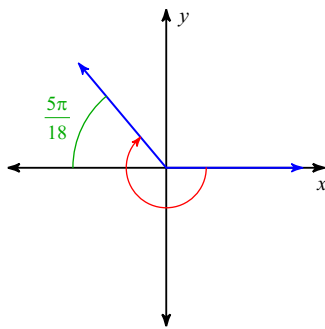
$$-\frac{2\pi}{3}$$

12)



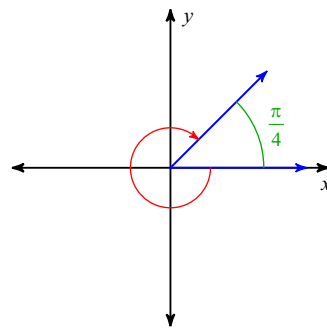
$$-\frac{\pi}{4}$$

13)



$$-\frac{23\pi}{18}$$

14)



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