

Worksheet 11 - Lesson 39

Date _____ Period _____

Convert each degree measure into radians and each radian measure into degrees.

1) -510°

2) -120°

3) 600°

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

5) $\frac{11\pi}{4}$

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

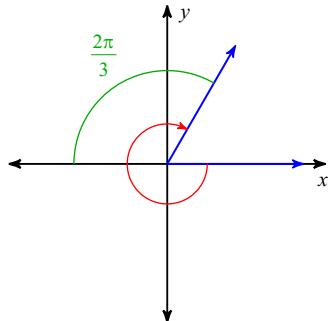
State the quadrant in which the terminal side of each angle lies.

7) $-\frac{23\pi}{6}$

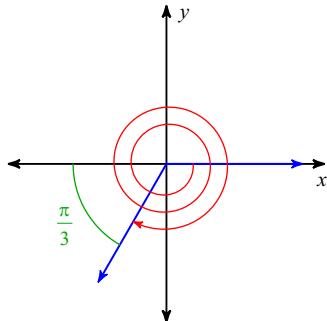
8) $-\frac{\pi}{4}$

Find the measure of each angle.

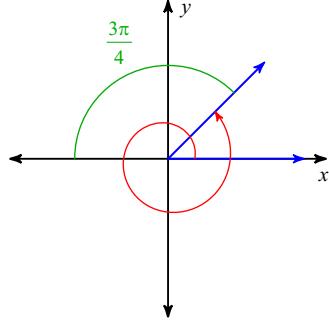
9)



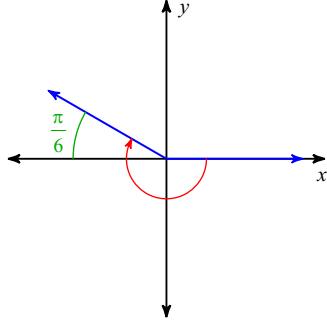
10)



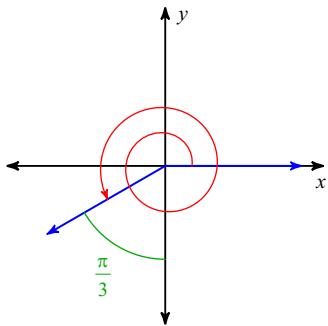
11)



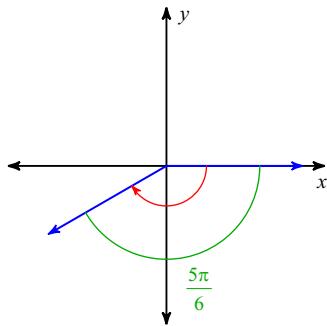
12)



13)

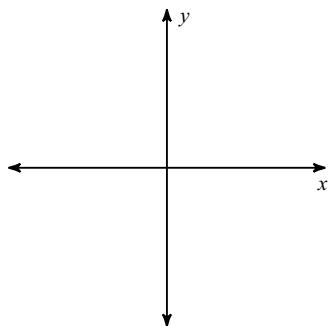


14)

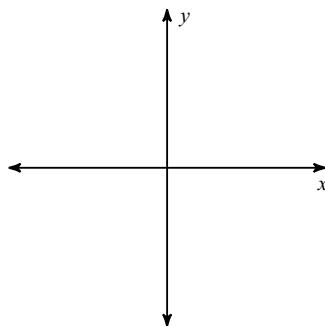


Draw an angle with the given measure in standard position.

15) $-\frac{10\pi}{3}$



16) $\frac{7\pi}{6}$



Find the reference angle.

17) $-\frac{11\pi}{3}$

18) $-\frac{9\pi}{4}$

19) $\frac{11\pi}{6}$

20) $\frac{8\pi}{3}$

Find the exact value of each trigonometric function.

21) $\sin \frac{15\pi}{4}$

22) $\sin \frac{9\pi}{4}$

23) $\tan -\frac{17\pi}{3}$

24) $\cos \frac{13\pi}{3}$

25) $\tan 3\pi$

26) $\sin \frac{17\pi}{3}$