

Unit 1 Review

Convert each decimal degree measure into degrees-minutes-seconds.

1) 215.4675°

2) 259.4325°

3) 266.93°

Convert each degrees-minutes-seconds into decimal degrees.

4) $99^\circ 27' 18''$

5) $149^\circ 35' 42''$

6) $305^\circ 57' 9''$

Convert each degree measure into radians.

7) 195°

8) 80°

9) -620°

Convert each radian measure into degrees.

10) $\frac{65\pi}{36}$

11) $\frac{47\pi}{36}$

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

State if the given angles are coterminal.

13) 5° , 365°

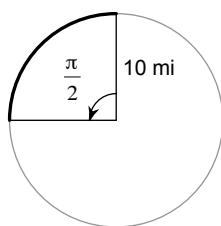
14) 145° , -55°

15) $\frac{49\pi}{36}$, $-\frac{121\pi}{36}$

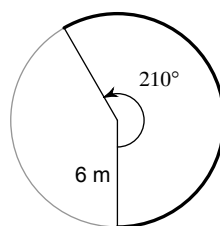
16) $\frac{17\pi}{36}$, $-\frac{55\pi}{36}$

Find the length of each arc.

17)

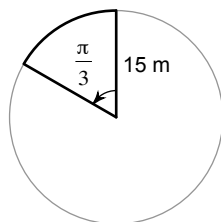


18)

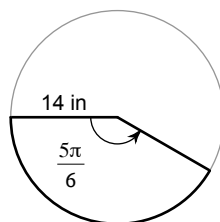


Find the area of each sector.

19)



20)



21) What is the apparent size of an object 24 in long held 130 in from your eyes?

Find the exact value of each trigonometric function.

22) $\sin 150^\circ$

23) $\cos 330^\circ$

24) $\tan 240^\circ$

25) $\sin -60^\circ$

26) $\cos 405^\circ$

27) $\sin \frac{2\pi}{3}$

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

29) $\tan \frac{5\pi}{3}$

30) $\sin \frac{11\pi}{2}$

31) $\cos \frac{23\pi}{6}$

32) $\tan -\frac{3\pi}{4}$

33) $\csc 330^\circ$

34) $\csc -240^\circ$

35) $\sec 315^\circ$

36) $\sec -330^\circ$

37) $\cot 330^\circ$

38) $\cot -270^\circ$

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

40) $\csc \frac{13\pi}{3}$

41) $\sec \frac{7\pi}{6}$

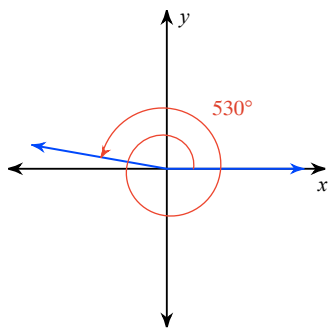
42) $\sec \frac{7\pi}{2}$

43) $\cot 0$

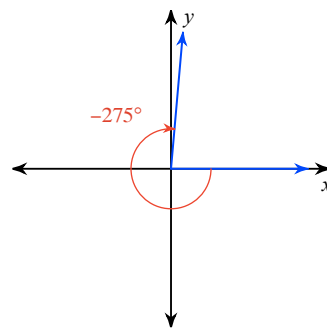
44) $\cot \frac{8\pi}{3}$

Find the reference angle.

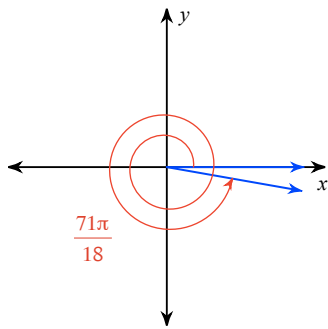
45)



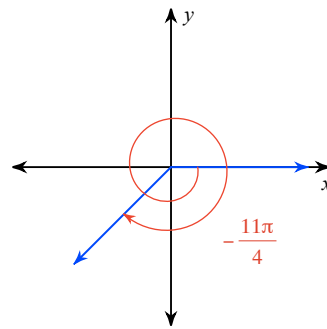
46)



47)

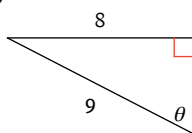


48)

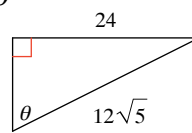


Find the value of the trig function indicated.

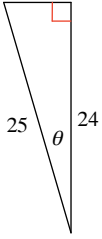
49) $\csc \theta$



50) $\sec \theta$



51) $\cot \theta$



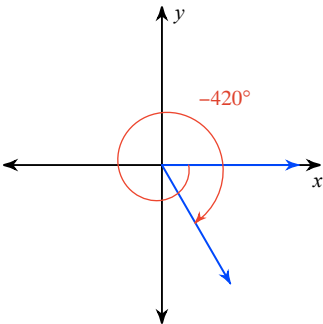
52) Find $\tan \theta$ if $\sin \theta = \frac{4}{5}$

53) Find $\tan \theta$ if $\sec \theta = \frac{17}{8}$

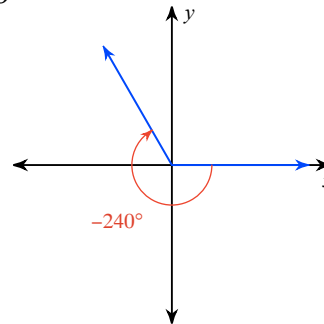
54) Find $\csc \theta$ if $\cot \theta = \frac{7}{24}$

Find the exact value of each trigonometric function.

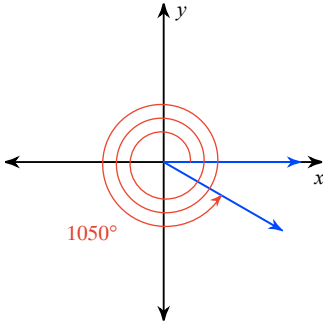
55) $\cot \theta$



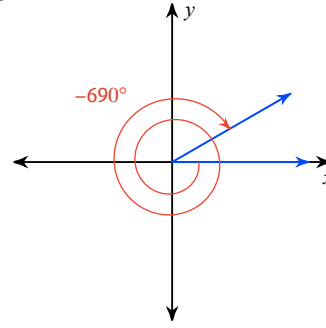
56) $\csc \theta$



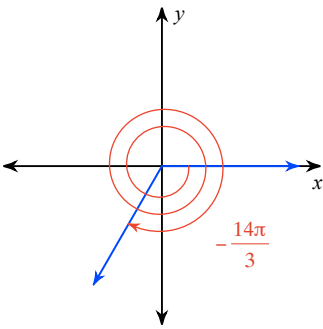
57) $\sec \theta$



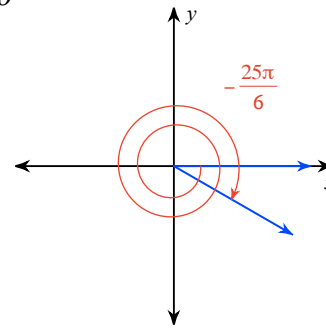
58) $\cot \theta$



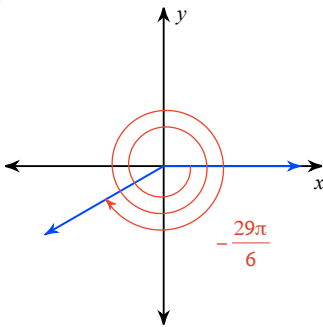
59) $\cot \theta$



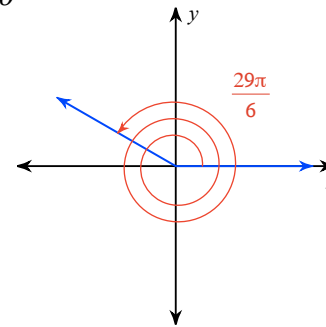
60) $\sec \theta$



61) $\csc \theta$

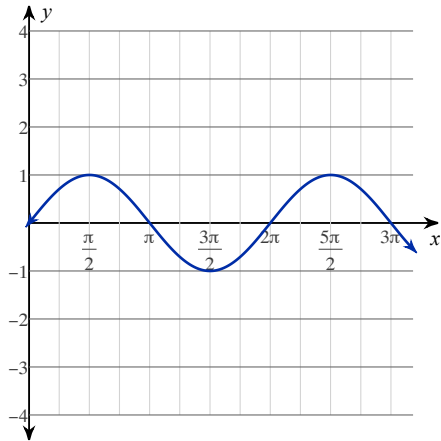


62) $\cos \theta$

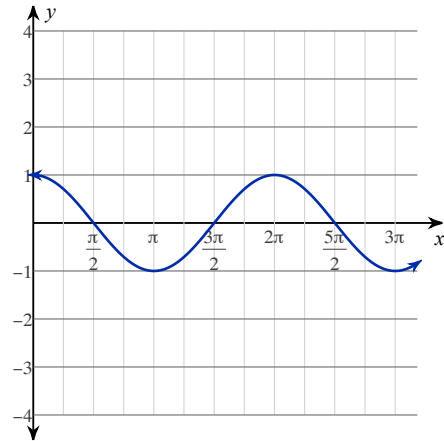


Write the function for each graph.

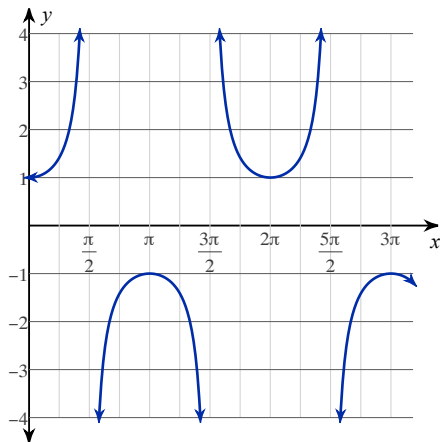
63) function: _____



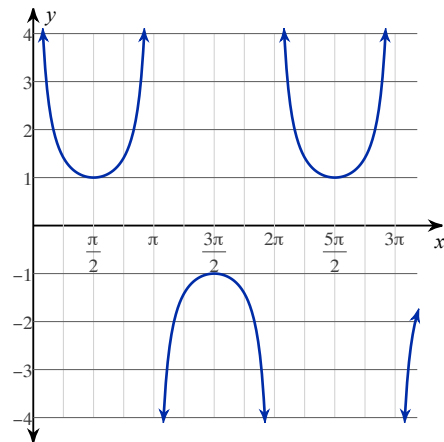
64) function: _____



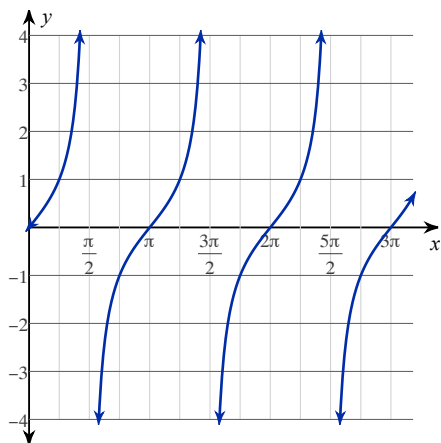
65) function: _____



66) function: _____



67) function: _____



68) function: _____

