

# Radians and Degree Measures

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

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

2)  $\frac{19\pi}{12}$

3)  $-665^\circ$

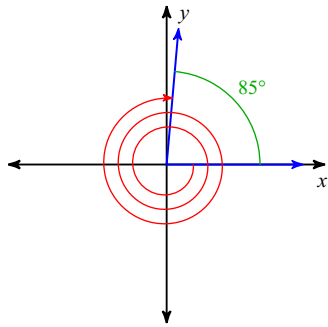
4)  $175^\circ$

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

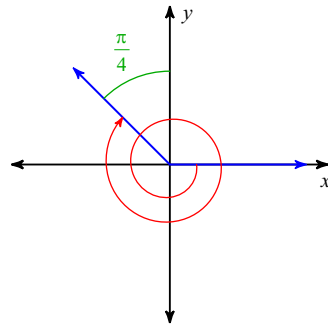
6)  $20^\circ$

Find the measure of each angle.

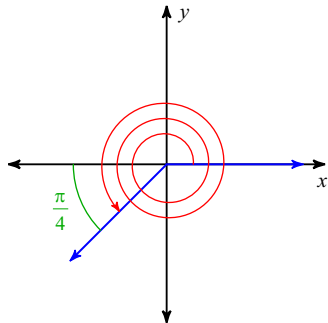
7)



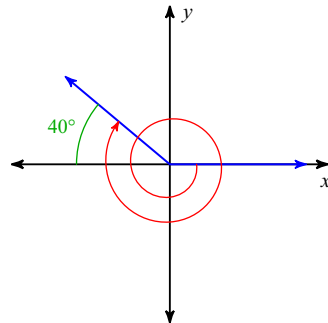
8)



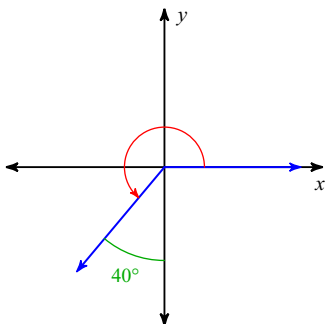
9)



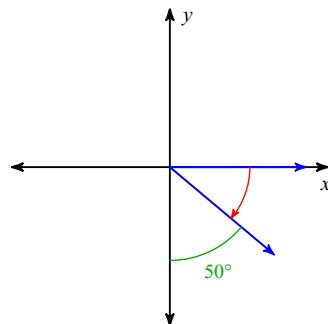
10)



11)

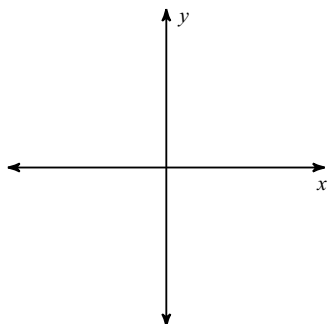


12)

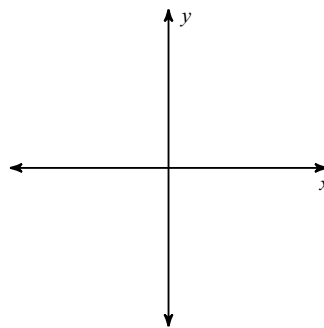


Draw an angle with the given measure in standard position.

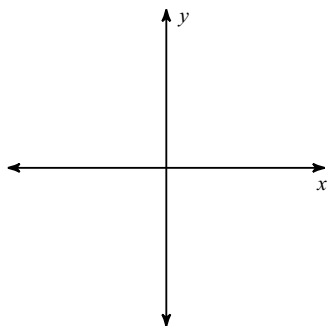
13)  $\frac{23\pi}{6}$



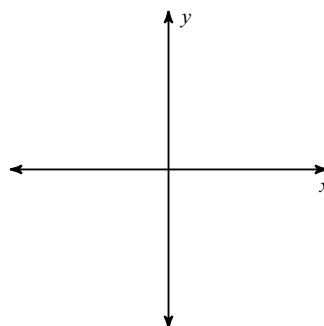
14)  $295^\circ$



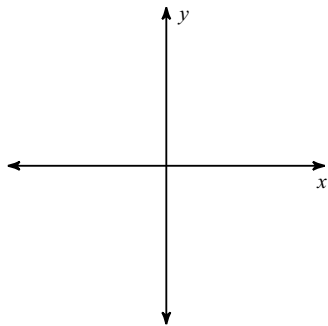
15)  $-680^\circ$



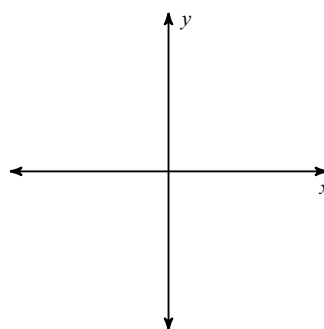
16)  $-\frac{25\pi}{18}$



17)  $350^\circ$



18)  $\frac{7\pi}{3}$



State if the given angles are coterminal.

19)  $320^\circ, -220^\circ$

20)  $355^\circ, 715^\circ$

21)  $\frac{11\pi}{12}, \frac{47\pi}{12}$

22)  $\frac{\pi}{2}, \frac{19\pi}{18}$

**Find a coterminal angle between  $0^\circ$  and  $360^\circ$ .**

23)  $-716^\circ$

24)  $1010^\circ$

**Find a coterminal angle between 0 and  $2\pi$  for each given angle.**

25)  $\frac{65\pi}{12}$

26)  $-\frac{5\pi}{4}$

**Find a positive and a negative coterminal angle for each given angle.**

27)  $696^\circ$

28)  $-180^\circ$

29)  $\frac{19\pi}{12}$

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

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

31)  $360^\circ$

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

33)  $-390^\circ$

34)  $-290^\circ$

35)  $\frac{25\pi}{6}$

36)  $\frac{\pi}{2}$

37)  $210^\circ$

38)  $\frac{13\pi}{6}$