

Angles and Angle Measure

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

1) 325°

2) 60°

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

4) $\frac{23\pi}{12}$

5) 570°

6) -315°

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

7) 128.77°

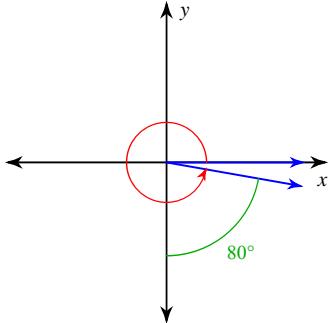
8) $232^\circ 7' 57''$

9) $-154^\circ 47' 42''$

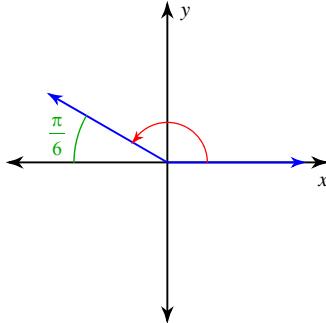
10) -0.9225°

Find the measure of each angle.

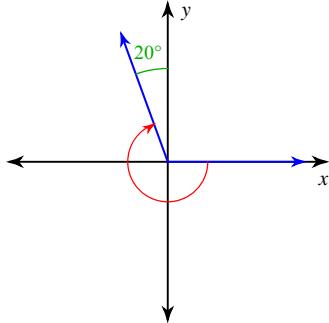
11)



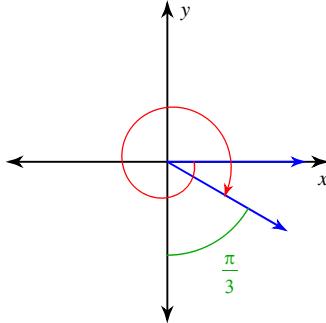
12)



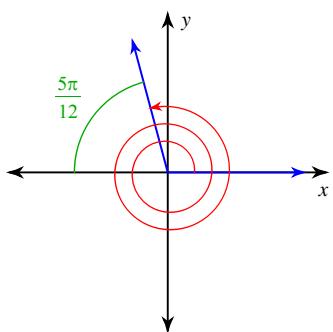
13)



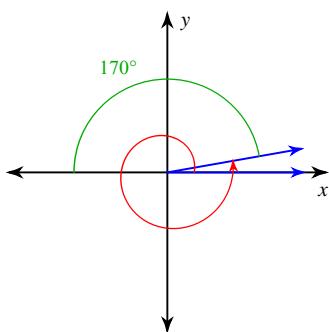
14)



15)

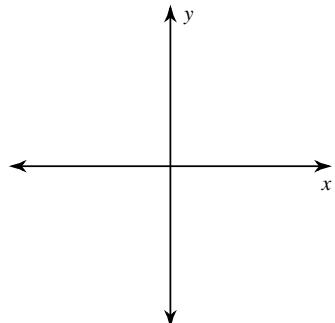


16)

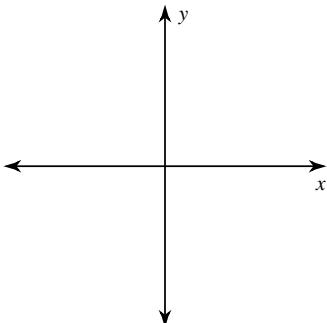


Draw an angle with the given measure in standard position.

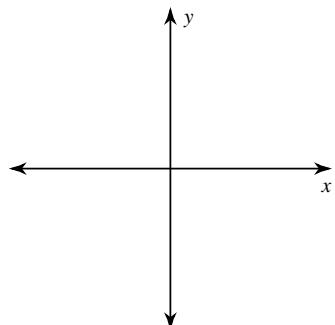
17) 280°



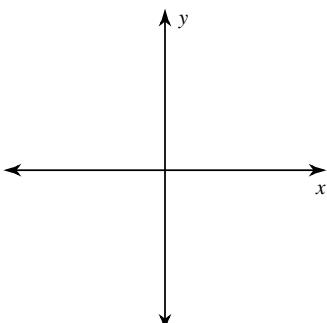
18) 710°



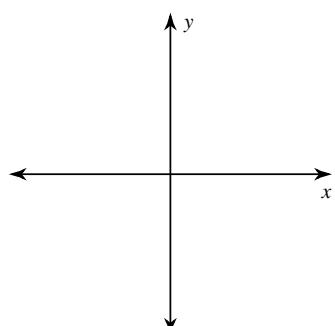
19) -120°



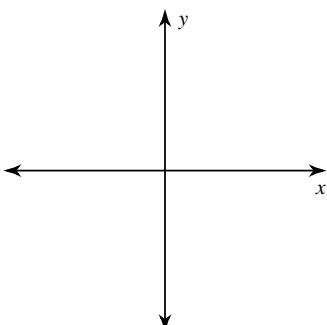
20) $\frac{11\pi}{6}$



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



22) 440°



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

23) -509°

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

Angles and Angle Measure

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

1) $325^\circ \frac{65\pi}{36}$

2) $60^\circ \frac{\pi}{3}$

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

4) $\frac{23\pi}{12}$

-240°

345°

5) $570^\circ \frac{19\pi}{6}$

6) $-315^\circ -\frac{7\pi}{4}$

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

7) 128.77°

8) $232^\circ 7' 57''$

$128^\circ 46' 12''$

232.1325°

9) $-154^\circ 47' 42''$

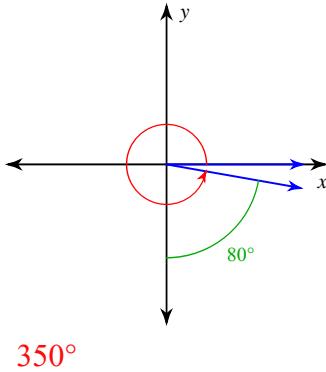
10) -0.9225°

-154.795°

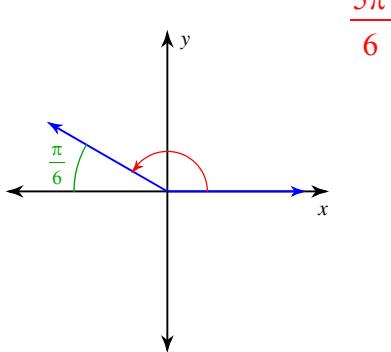
$-0^\circ 55' 21''$

Find the measure of each angle.

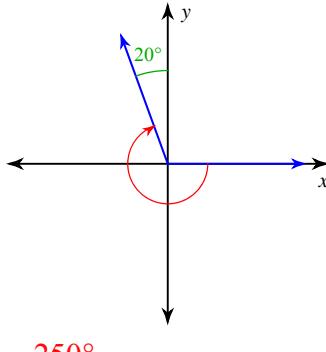
11)



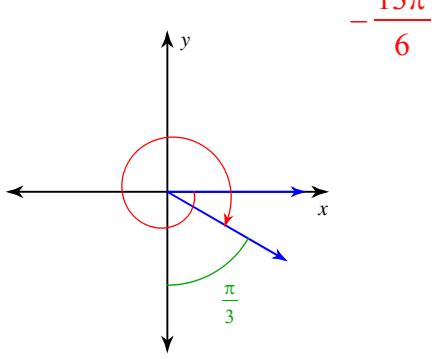
12)



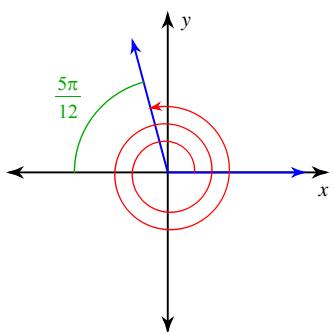
13)



14)

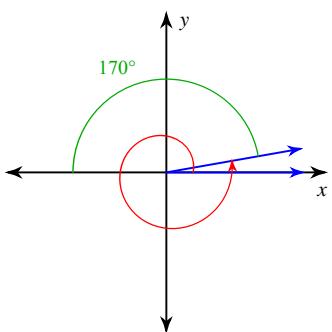


15)



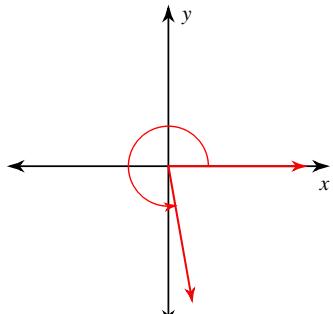
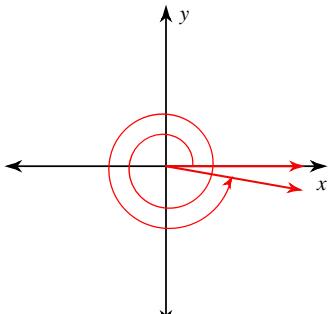
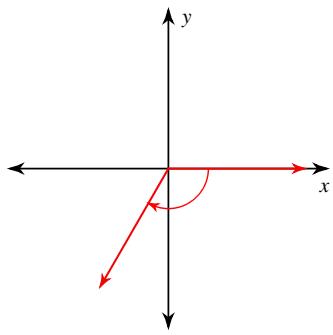
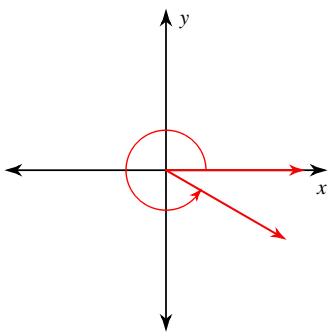
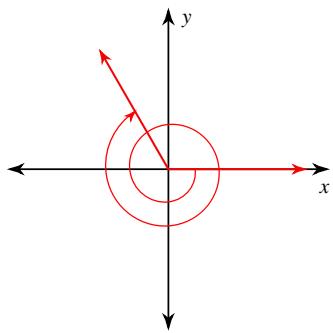
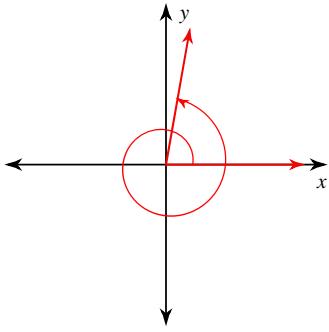
$$\frac{55\pi}{12}$$

16)



$$370^\circ$$

Draw an angle with the given measure in standard position.

17) 280° 18) 710° 19) -120° 20) $\frac{11\pi}{6}$ 21) $-\frac{10\pi}{3}$ 22) 440° 

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

23) -509° III24) $-\frac{5\pi}{6}$ III