

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°

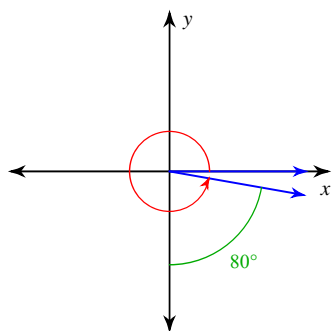
8) $232^\circ 7' 57''$

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

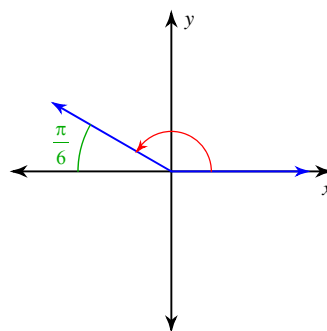
10) -0.9225°

Find the measure of each angle.

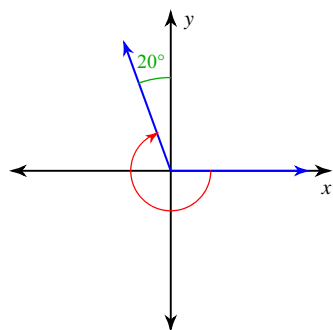
11)



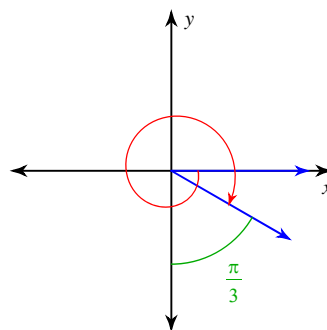
12)



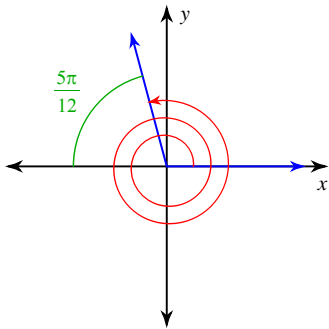
13)



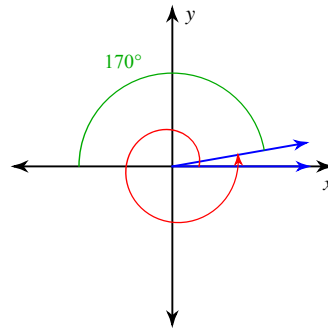
14)



15)

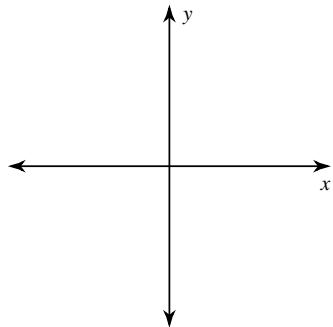


16)

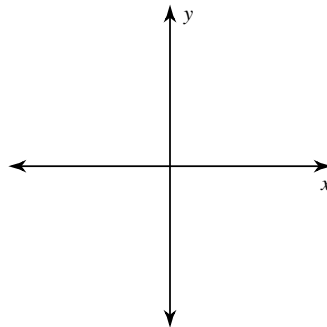


Draw an angle with the given measure in standard position.

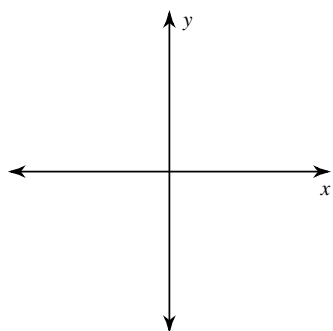
17) 280°



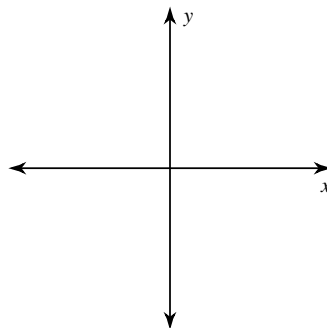
18) 710°



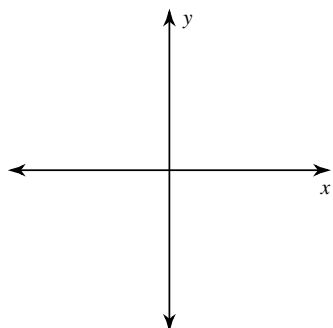
19) -120°



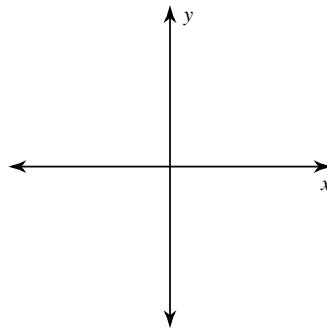
20) $\frac{11\pi}{6}$



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° $\frac{65\pi}{36}$

2) 60° $\frac{\pi}{3}$

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

-240°

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

345°

5) 570° $\frac{19\pi}{6}$

6) -315° $-\frac{7\pi}{4}$

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

7) 128.77°

$128^\circ 46' 12''$

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

232.1325°

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

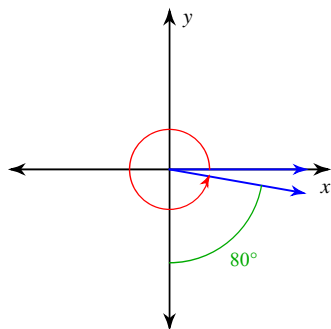
-154.795°

10) -0.9225°

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

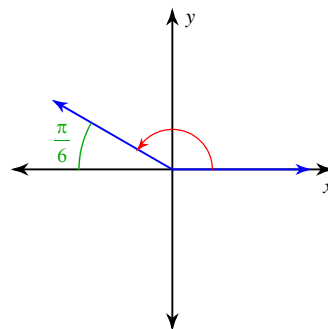
Find the measure of each angle.

11)



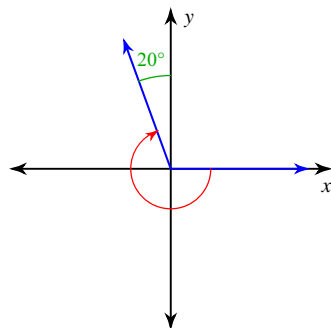
350°

12)



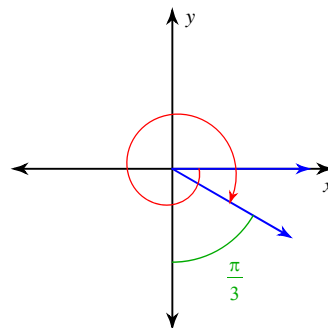
$\frac{5\pi}{6}$

13)



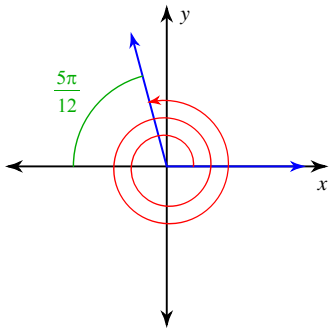
-250°

14)

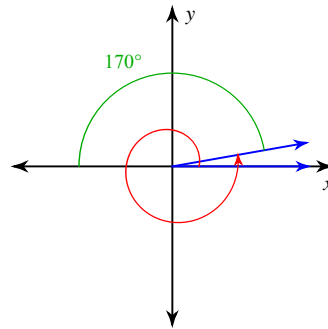


$-\frac{13\pi}{6}$

15) $\frac{5\pi}{12}$

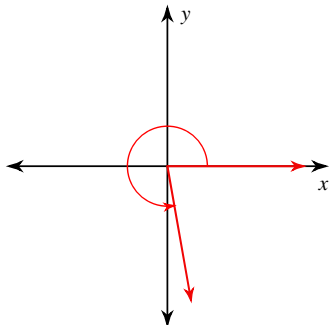


16) 370°

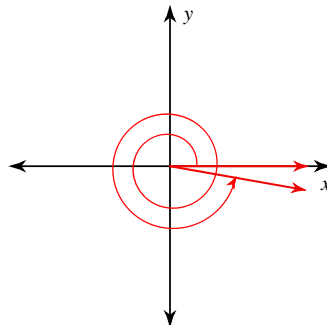


Draw an angle with the given measure in standard position.

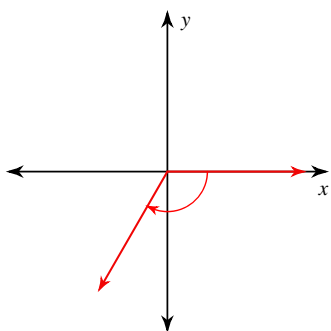
17) 280°



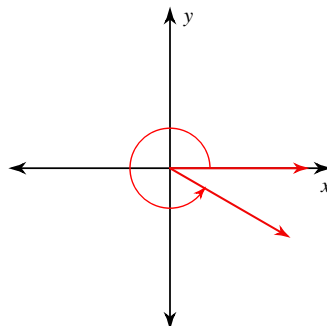
18) 710°



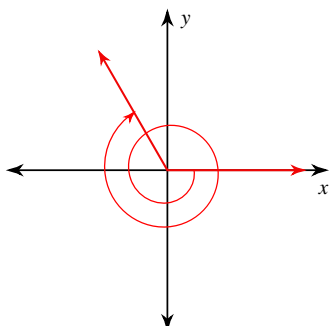
19) -120°



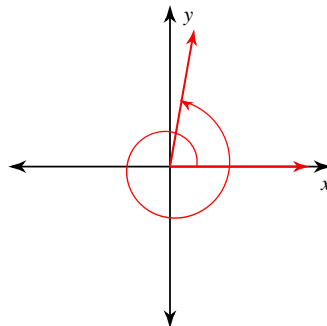
20) $\frac{11\pi}{6}$



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



22) 440°



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

23) -509° III

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