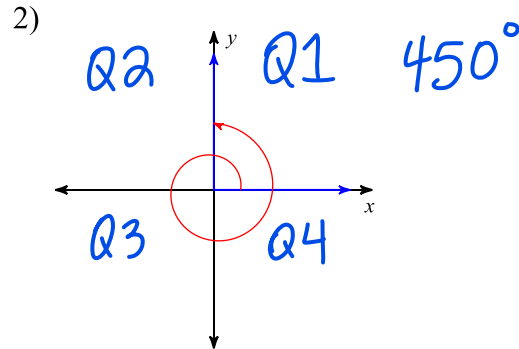
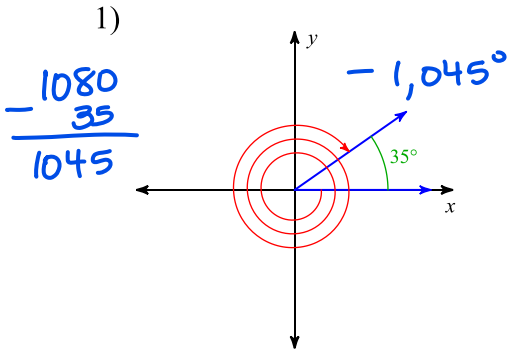


Angles Intro Notes

Find the measure of each angle.

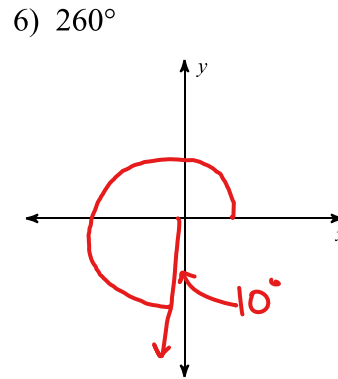
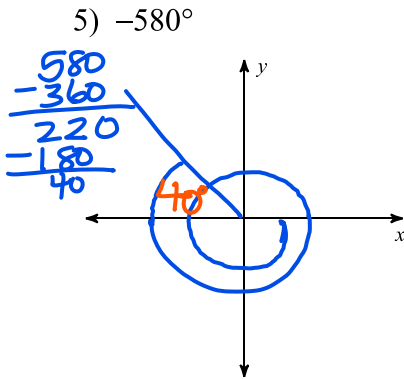


State the quadrant in which the terminal side of each angle lies.

3) 101° II

4) -454° III

Draw an angle with the given measure in standard position.



\Rightarrow angles share the same terminal side

State if the given angles are coterminal.

7) $345^\circ, -705^\circ$
 $\frac{345}{-360}$
NO. $\frac{-15-360}{-360} = -375-360$

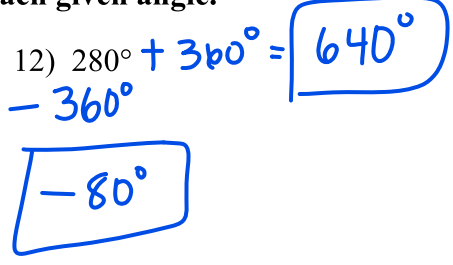
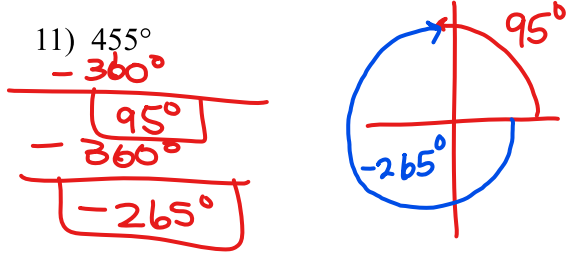
8) $355^\circ, -365^\circ$
 $\frac{355}{-360}$ yes
 $\frac{-5-360}{-360} = -365^\circ$

Find a coterminal angle between 0° and 360° . ~~335~~

9) $-132^\circ + 360 = 228^\circ$

10) 820°
 $\frac{820}{-360} = 100^\circ$

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

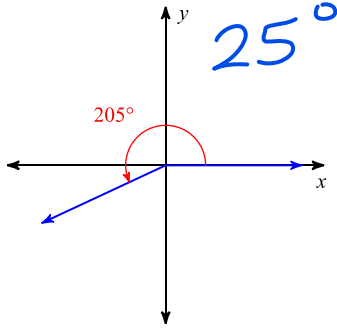


acute angle between terminal side and x-axis

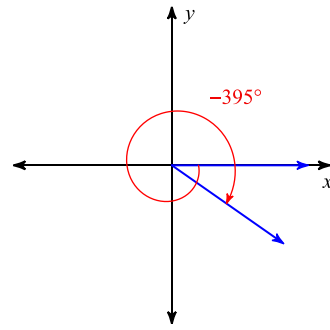
positive

Find the reference angle.

13)

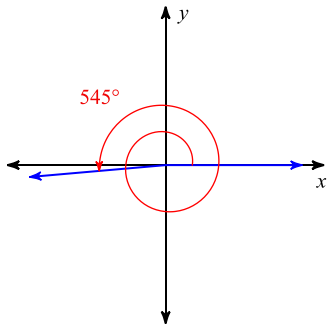


14)

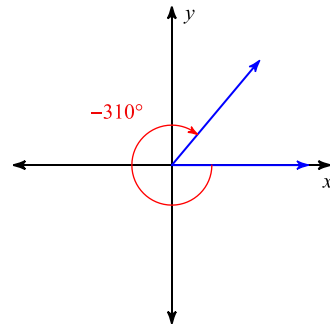


15)

5°



16)



17) 350°

10°

18) 565°

$$\begin{array}{r} 565^\circ \\ -360^\circ \\ \hline 205^\circ \end{array}$$

25°

Convert each degree measure into radians.

$$19) 60^\circ \times \frac{\pi}{180^\circ} = \frac{\pi}{3}$$

$$2\pi = 360^\circ$$

$$\pi = 180^\circ$$

$$20) 330^\circ \times \frac{\pi}{180^\circ} = \frac{11\pi}{6}$$

$$21) 225^\circ \times \frac{\pi}{180^\circ} = \frac{5\pi}{4}$$

$$22) -210^\circ \times \frac{\pi}{180^\circ} = -\frac{7\pi}{6}$$

Convert each radian measure into degrees.

$$23) \frac{17\cancel{\pi}}{18} \times \frac{180^\circ \cancel{\pi}}{\pi} = 170^\circ$$

$$24) \frac{\pi}{9} \times \frac{180^\circ}{\pi} = 20^\circ$$

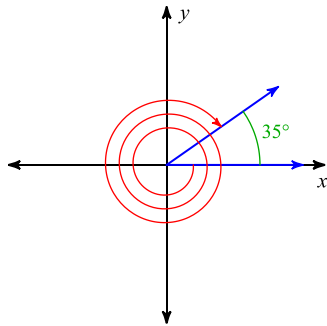
$$25) -\frac{3\pi}{2} \rightarrow -270^\circ$$

$$26) -\frac{53\cancel{\pi}}{36} \times \frac{180^\circ \cancel{\pi}}{\pi} = -265^\circ$$

Angles Intro Notes

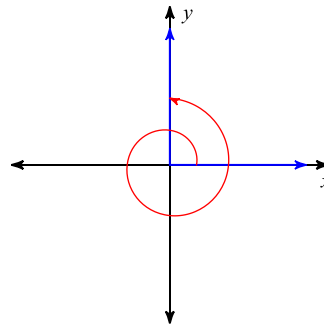
Find the measure of each angle.

1)



-1045°

2)



450°

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

3) 101°

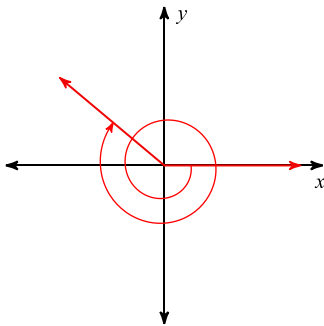
II

4) -454°

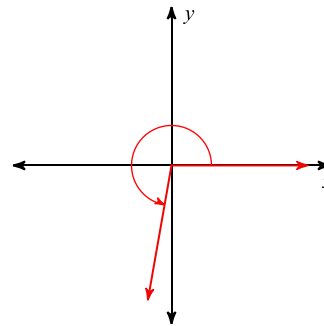
III

Draw an angle with the given measure in standard position.

5) -580°



6) 260°



State if the given angles are coterminal.

7) 345°, -705°

No

8) 355°, -365°

Yes

Find a coterminal angle between 0° and 360°.

9) -132°

228°

10) 820°

100°

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

11) 455°

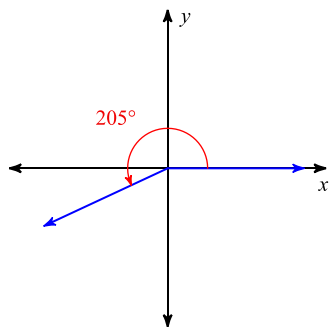
95° and -265°

12) 280°

640° and -80°

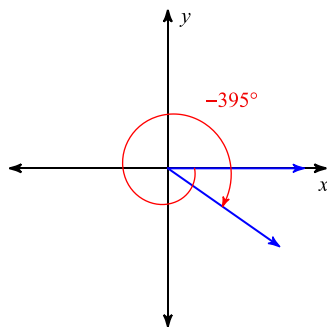
Find the reference angle.

13)



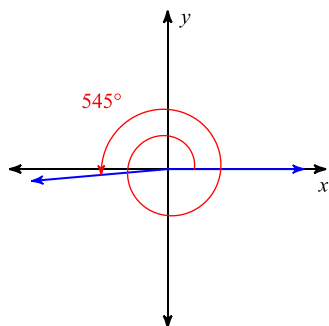
25°

14)



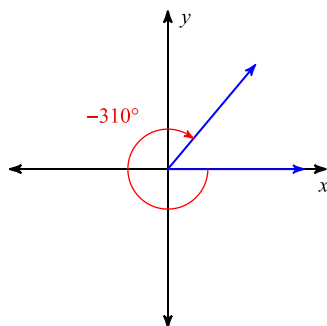
35°

15)



5°

16)



50°

17) 350°

10°

18) 565°

25°

Convert each degree measure into radians.

19) 60°

$\frac{\pi}{3}$

20) $330^\circ \frac{11\pi}{6}$

21) 225°

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

22) $-210^\circ -\frac{7\pi}{6}$

Convert each radian measure into degrees.

23) $\frac{17\pi}{18}$

170°

24) $\frac{\pi}{9}$

20°

25) $-\frac{3\pi}{2}$

-270°

26) $-\frac{53\pi}{36}$

-265°