

Algebra II
Trigonometry 3

Name _____

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. -315°

6. 7

Find one positive angle and one negative angle that are coterminal with the given angle.

7. 70°

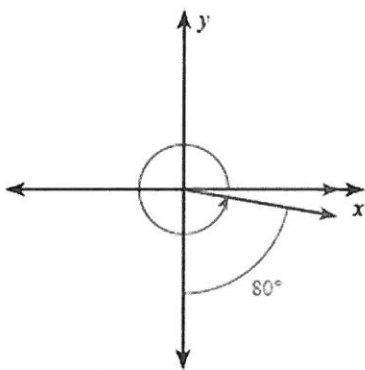
8. -125°

9. $\frac{17\pi}{12}$

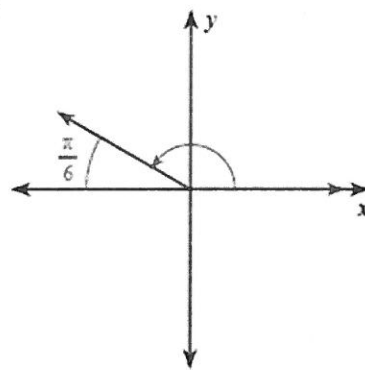
10. $-\frac{5\pi}{6}$

Find the measure of each angle.

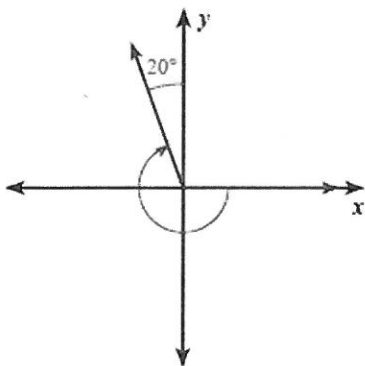
11)



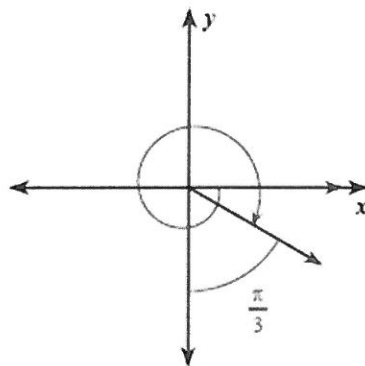
12)



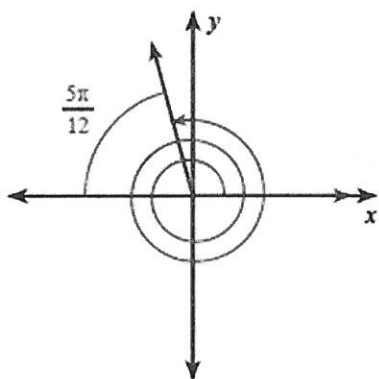
13)



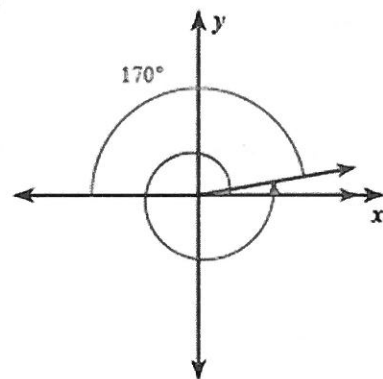
14)



15)

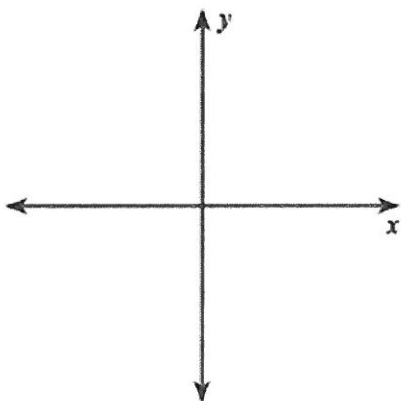


16)

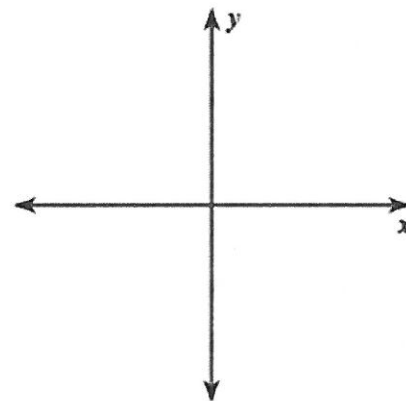


Draw an angle with the given measure in standard position.

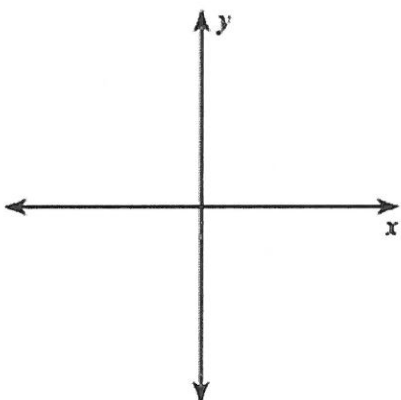
17) 280°



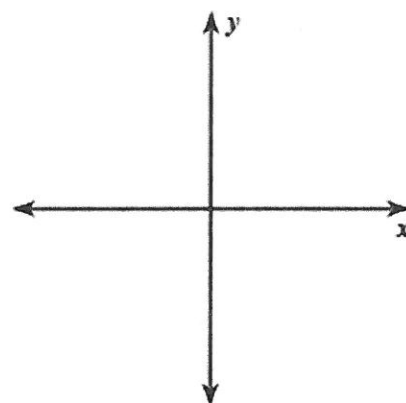
18) 710°



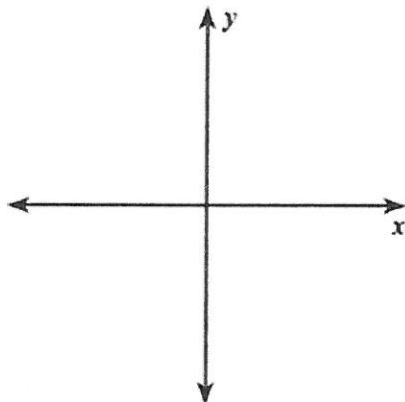
19) -120°



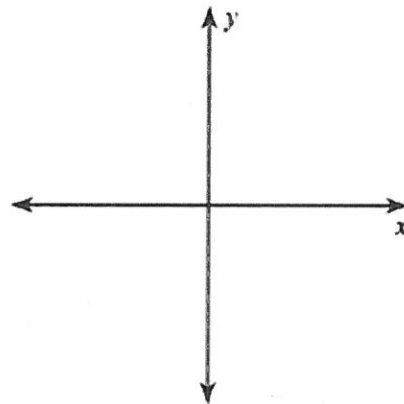
20) $\frac{11\pi}{6}$



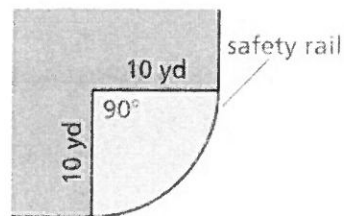
21) $-\frac{10\pi}{3}$



22) 440°



23. The observation deck of a building forms a sector with the dimensions shown. Find the length of the safety rail and the area of the deck.



24. You work every Saturday from 9:00 am to 5:00 pm. Draw a diagram that shows the rotation completed by the hour hand of a clock during this time. Find the measure of the angle generated by the hour hand in both degrees and radians. Compare this angle with the angle generated by the minute hand from 9:00 am to 5:00 pm.

