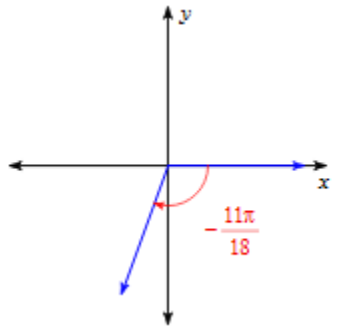
Honors Math II
Unit 9 day 3

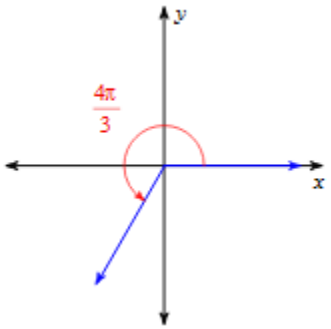
Name_____
Period_____Date_____

Find the reference angle.

1.



2.



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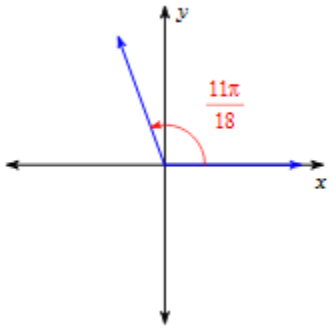

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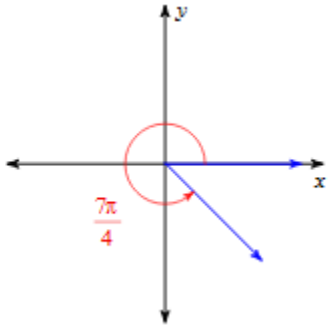
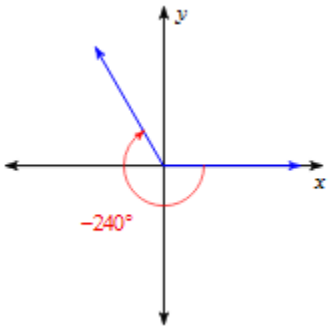


5.



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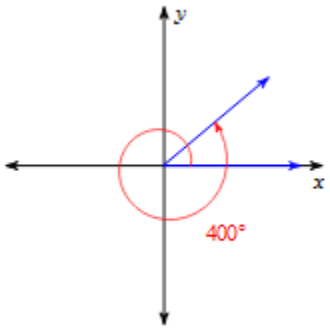
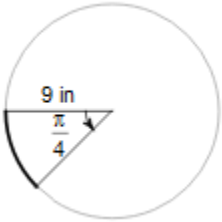
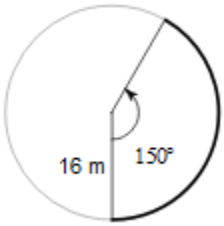


Find the length of each arc.

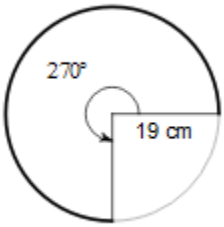
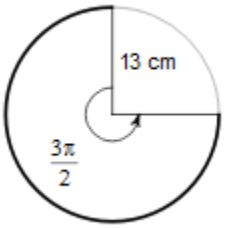
7.



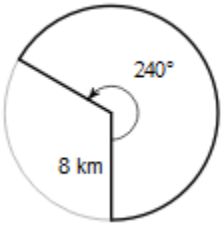
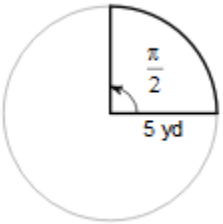
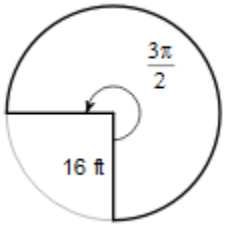
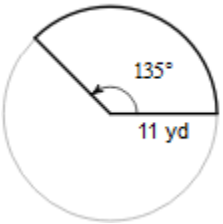
8.



Find the length of each arc.

9.  	10. $r = 5\ km, \theta = \frac{\pi}{3}$
11. $r = 11\ m, \theta = 75°$	12. 

Find the area of each sector.

13.  	14. $r = 12\ m, \theta = \frac{7\pi}{4}$
15.  	16. 
17. $r = 10\ ft, \theta = 210°$	18. 

Use the given point on the terminal side of an angle θ in standard position to evaluate the six trigonometric functions of .

19. $(8, 15)$

20. $(-7, -24)$

Find the value of each. Round your answer to the nearest ten-thousandths.

21. $\csc 61°$

22. $\sin 13°$

23. $\cos 22°$

24. $\cot 21°$

25. $\tan \frac{7\pi}{36}$

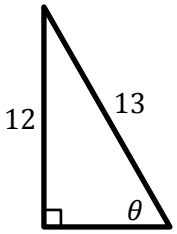
26. $\tan \frac{5\pi}{18}$

27. $\cot \frac{5\pi}{36}$

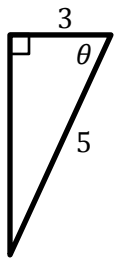
28. $\cos \frac{5\pi}{18}$

Find the value of the trig function indicated.

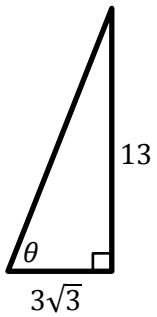
29. $\mathbf{\tan\theta} = ?$



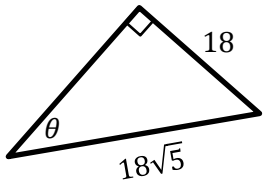
30. $\mathbf{\cot\theta} = ?$



31. $\mathbf{\cot\theta} = ?$



32. $\mathbf{\tan\theta} = ?$



33. Find $\cos\theta$ if $\sin\theta = \frac{3}{5}$

34. Find $\sec\theta$ if $\cot\theta = \frac{7}{24}$

35. Find $\cos\theta$ if $\csc\theta = \frac{\sqrt{13}}{2}$

36. Find $\sec\theta$ if $\sin\theta = \frac{4}{5}$