6-7

NAME _____ DATE _____ PERIOD _____

Practice

Graphing Other Trigonometric Functions

Find each value by referring to the graphs of the trigonometric functions.

1. $\tan\left(-\frac{3\pi}{2}\right)$

undefined

2. $\cot\left(\frac{3\pi}{2}\right)$

0

3. $\sec 4\pi$

1

4. $\csc\left(-\frac{7\pi}{2}\right)$

1

Find the values of θ for which each equation is true.

5. $\tan\theta = 0$

πn, where n is an integer

6. $\cot\theta = 0$

$\frac{\pi}{2}n$, where n is an odd integer

7. $\csc\theta = 1$

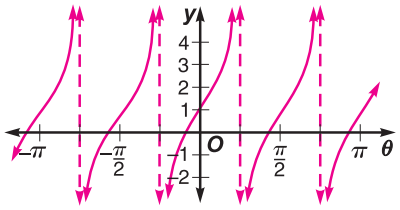
$\frac{\pi}{2} + 2\pi n$, where n is an integer

8. $\sec\theta = -1$

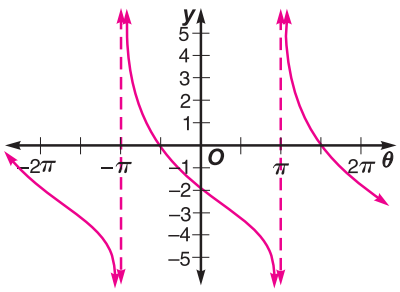
πn, where n is an odd integer

Graph each function.

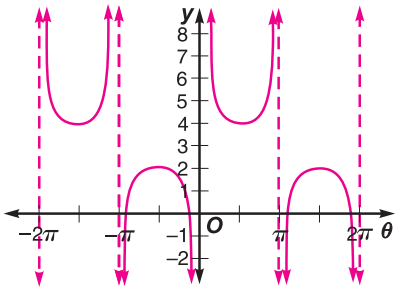
9. $y = \tan(2\theta + \pi) + 1$



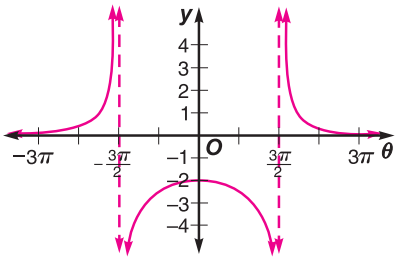
10. $y = \cot\left(\frac{\theta}{2} - \frac{\pi}{2}\right) - 2$



11. $y = \csc\theta + 3$



12. $y = \sec\left(\frac{\theta}{3} + \pi\right) - 1$



6-7

Reading

Technically, a
connected by
of an equatio
coordinates s

Practically s
a word as a c
value as a to
graph as a w
points, but a
based on the
deeper under

a. ***Read th***
sense of
its chara
graph sh
In the re
decrease
sine curv
and valle

b. ***Focus o***
facts but
functions
coordina
function
shown.
symmetr
x-axis at
at $x = \frac{\pi}{3}$
the maxi
sin $2x$ is

Discuss the discussion a graph's shap

Sample a
$y = x$ sin
shape of
peak. It r
$y \approx -1.5$ a
at the orig
$x = \pm 0.5$.
2.5 at abo
about the