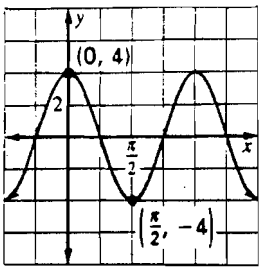
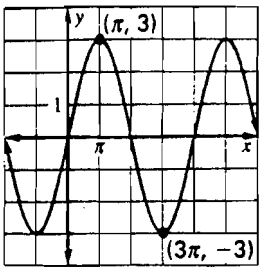
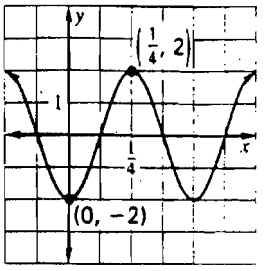
Algebra 2 / Trig H HW # ____ Name_____

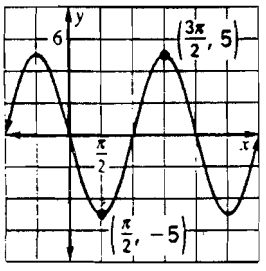
Section 14-5

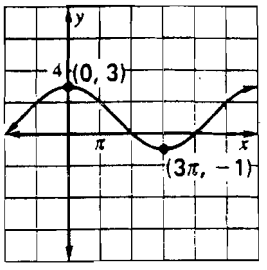
Write a function for the sinusoid. (Watch x, y scales!)

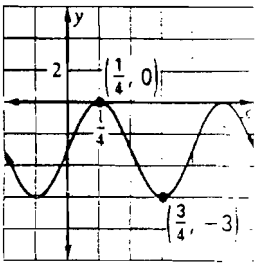
1. 

2. 

3. 

4. 

5. 

6. 

Write a trigonometric function for the sinusoid with the given maximum and minimum points.

7. maximum $\left(0, \frac{1}{2}\right)$
   minimum $\left(\pi, \frac{-1}{2}\right)$

8. maximum $\left(\frac{\pi}{4}, 5\right)$
   minimum $\left(\frac{3\pi}{4}, -5\right)$

9. maximum $(0,3)$
   minimum $(2\pi, -3)$

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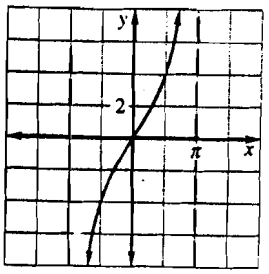
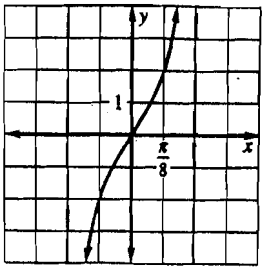
10. Write the equation for a sine function with range $-3 \le y \le 5$, period 6π, and horizontal shift $\frac{\pi}{2}$

Write the equation for each tangent function graphed.

11.



12.



Graph one period of each function.

13. $y = \csc\frac{2}{3}x$

14. $y = 2\cos 2\left(x + \frac{\pi}{2}\right) - 3$

15. $y = -3\cot x + 1$