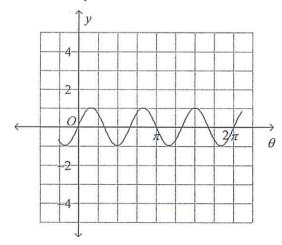
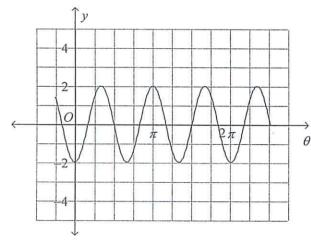
13. Write the equation for the sine function shown below.



Write a cosine function for the graph.

14.



- 15. Write an equation of the cosine function with amplitude 2 and period  $4\pi$ .
- 16. Sketch the graph of the tangent curve  $y = \tan 2x$  in the interval from 0 to  $2\pi$ .
- 17. Identify the period for  $y = \tan \frac{3\pi}{4} \theta$  and tell where two asymptotes occur for the function.
- 18. Write an equation for the translation 3 units down of  $y = \sin x$ .

Graph the function in the interval from 0 to  $2\pi$ .

19.  $y = -2\cos\left(x - \frac{\pi}{2}\right) - 1$