

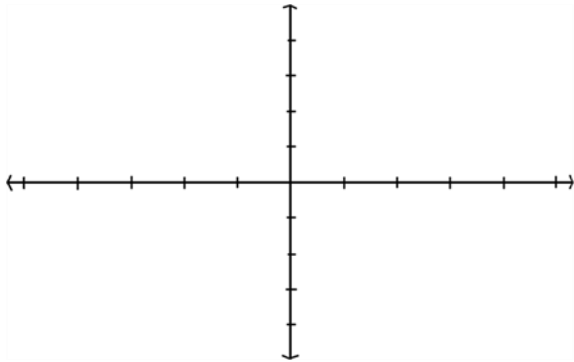
1. $y = -3 \sin(4x - \pi)$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



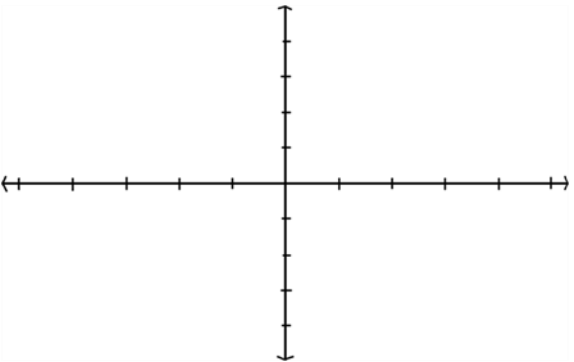
2. $y = \frac{3}{2} \cos\left(\frac{\pi}{3}x\right) - 1$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



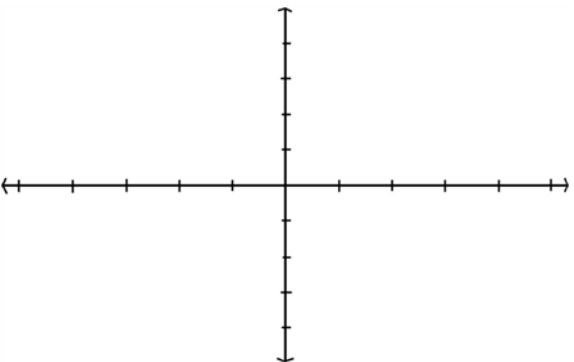
3. $y = 4 \tan\left(x + \frac{3\pi}{4}\right) + 2$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



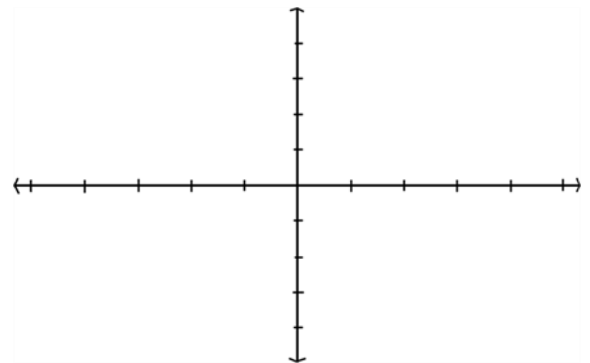
4. $y = -\frac{1}{2} \cot\left(\frac{\pi}{2}x\right) + 1$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



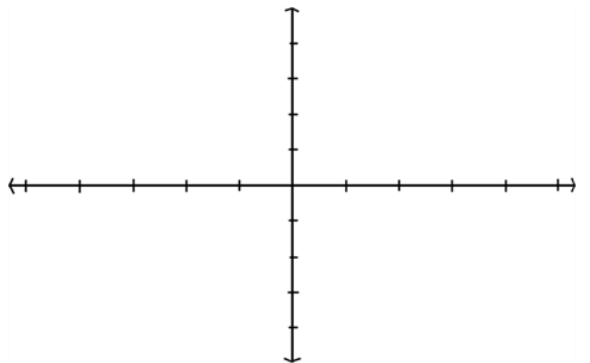
5. $y = 2 \sec\left(5x + \frac{3\pi}{2}\right)$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



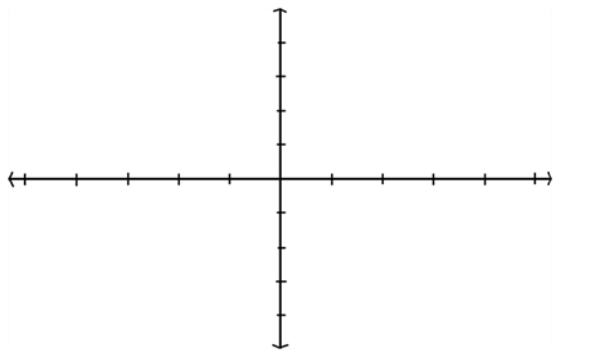
6. $y = -\csc\left(2x - \frac{\pi}{2}\right) + \frac{1}{2}$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



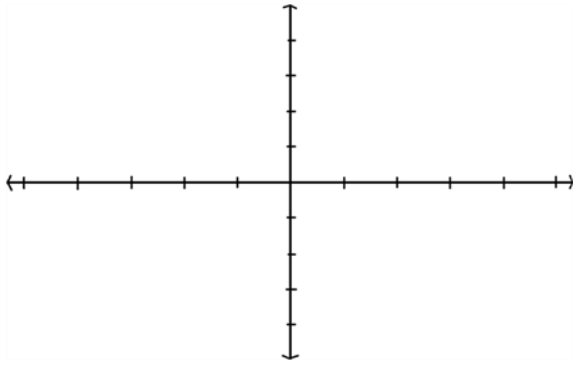
$$7. y = -\frac{1}{4} \tan\left(3x - \frac{\pi}{2}\right) - \frac{1}{2}$$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



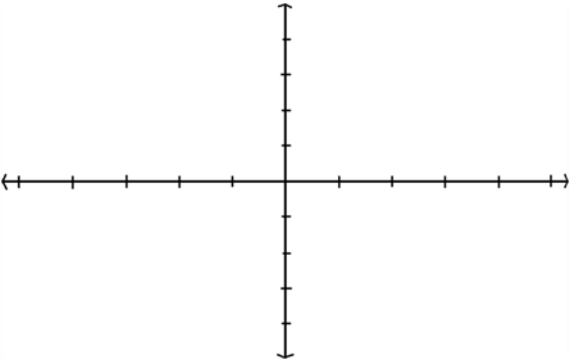
$$8. y = \frac{2}{3} \csc\left(\frac{3\pi}{2}x + \pi\right) - \frac{1}{3}$$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



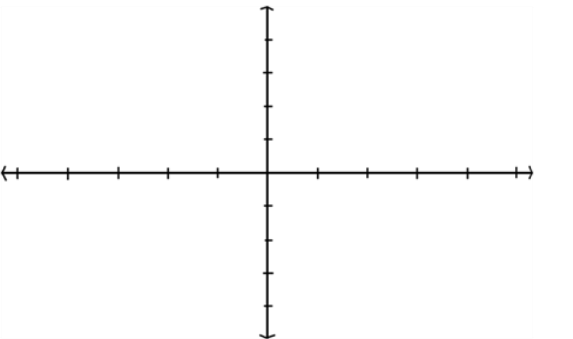
$$9. y = 2 \cot\left(\frac{1}{3}x + \frac{\pi}{4}\right) + 1$$

amplitude: _____

period: _____

horizontal shift: _____

vertical shift: _____



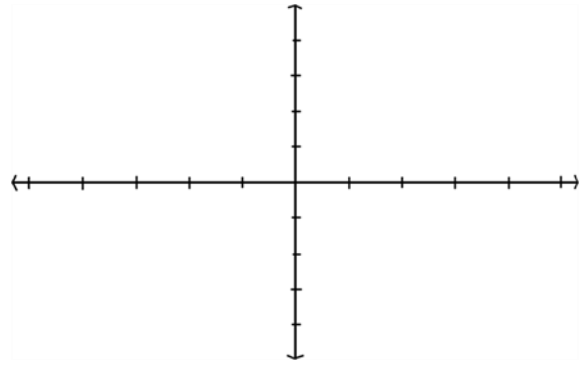
$$10. y = -\frac{3}{4} \sec\left(\pi x - \frac{\pi}{2}\right) + \frac{1}{4}$$

amplitude: _____

period: _____

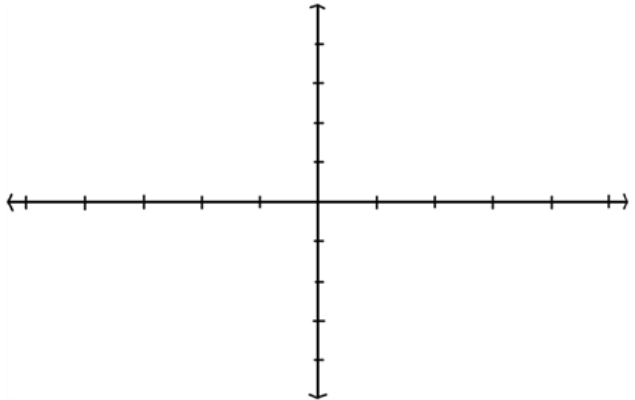
horizontal shift: _____

vertical shift: _____



$$11. y = 2 \sin x - \cos x$$

Draw enough to fill entire graph.



$$12. y = x - \sin 2x$$

Draw enough to fill entire graph.

