

April 8/9

For each of the following find the equation of the center line axis, the period, the amplitude and the phase shift. Draw each function showing at least one cycle. Label the high, low and center line points of one cycle. Check your answers on the graphing calculator. REMEMBER: The θ -axis is the same as the x -axis.

14. $y = 3 \sin\left(\frac{1}{2}\theta\right)$

15. $y = 5 \sin(\theta) + 3$

16. $y = \cos(2\theta) - 1$

17. $y = 1.4 \cos(\theta + 45^\circ)$

18. $y = -\sin(2(\theta - 60^\circ))$

19. $y = 4 \sin\left(\frac{1}{2}(\theta - 45^\circ)\right)$

20. $y = -6 \cos(3\theta) + 1$

Write both a sine equation and a cosine equation for each of the following graphs.

