Accel. PreCalculus Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Graphing Sine Functions Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Amplitude Changes and Vertical Shifts

Graph each function. State the amplitude, vertical shift, minimum value, and maximum value.

1. $y=4\sin(θ+2)$ 2. $y=\frac{1}{2}\sin(θ+1)$ 3. $y=-1+\frac{1}{2}\sin(θ)$

4. $y=3\sin(θ+\frac{3}{2})$ 5. $y=-4\sin(θ-1)$ 6. $y=\frac{1}{2}\sin(θ-4)$

7. $y=-2\sin(θ-2)$ 8. $y=-\frac{1}{2}\sin(θ-3)$ 9. $y=-2+\sin(θ)$







