

## 10-3 $y = A \sin (bx + c)$

Give the amplitude, period, and phase shift of each equation below.

1.  $y = 8 \sin(3\theta - 6)$

amplitude: \_\_\_\_\_

period: \_\_\_\_\_

phase shift: \_\_\_\_\_

2.  $y = 3 \cos(2\theta - 10^\circ)$

amplitude: \_\_\_\_\_

period: \_\_\_\_\_

phase shift: \_\_\_\_\_

3.  $y = 4 \cos(10\theta - 270^\circ)$

amplitude: \_\_\_\_\_

period: \_\_\_\_\_

phase shift: \_\_\_\_\_

Write the equation of a sine function with each amplitude, period & phase shift.

4. amplitude = 3

period =  $45^\circ$

phase shift =  $180^\circ$

Equation: \_\_\_\_\_

5. amplitude =  $\frac{2}{5}$

period =  $720^\circ$

phase shift =  $-40^\circ$

Equation: \_\_\_\_\_