

10- 3 Amplitude, Period, and Phase Shift

Name: _____

Time> Start: _____ Finish: _____ Total Time = _____

Take the given equations and state the amplitude, period, and phase shift of each.

1. $y = 5 \sin(3\theta^\circ)$

amplitude: _____

period: _____

phase shift: _____

2. $y = 4 \cos(4\theta^\circ - 180^\circ)$

amplitude: _____

period: _____

phase shift: _____

3. $y = 12 \cos\left(\frac{2}{3}\theta^\circ + 90^\circ\right)$

amplitude: _____

period: _____

phase shift: _____

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

amplitude: _____

period: _____

phase shift: _____

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

5. amplitude = 3

period = 45°

phase shift = 180°

Equation: _____

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

period = 720°

phase shift = -40°

Equation: _____

7. amplitude = 2

period = 90°

phase shift = 50°

Equation: _____

8. amplitude = 8

period = 540°

phase shift = -20°

Equation: _____