

For each problem, determine the domain, range, amplitude, and period. Then graph. For #'s 1-2 θ is in degrees:

1) $y = 2 + \sin \frac{\theta}{2}$

2) $y = \cos(\theta - 90^\circ)$

Domain: _____ Range: _____

Domain: _____ Range: _____

Amplitude: _____ Period: _____

Amplitude: _____ Period: _____

Vertical Shift _____ Phase shift _____

Vertical Shift _____ Phase shift _____

For each problem, determine the domain, range, amplitude, and period. Then graph. For #'s 3-4 θ is in radians:

3) $y = -1 + 5 \cos 2\theta$

4) $y = 5 \sin(\theta + \pi)$

Domain: _____ Range: _____

Domain: _____ Range: _____

Amplitude: _____ Period: _____

Amplitude: _____ Period: _____

Vertical Shift _____ Phase shift _____

Vertical Shift _____ Phase shift _____