

For each problem, determine the domain, range, amplitude, and period. Then graph. For #'s 1-4 θ is in degrees:

1) $y = \sin(2\theta - 50^\circ)$

2) $y = \cos\left(\frac{1}{2}(\theta + 80^\circ)\right)$

Domain: _____ Range: _____

Domain: _____ Range: _____

Amplitude: _____ Period: _____

Amplitude: _____ Period: _____

Vertical Shift _____ Phase shift _____

Vertical Shift _____ Phase shift _____

3) $y = 2\cos(\theta + 40^\circ)$

4) $y = 3\sin(10\theta + 10^\circ)$

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 5-6 θ is in radians:

5) $y = \sin(5\theta - \pi)$

6) $y = \cos\left(\frac{\theta}{3} + \frac{\pi}{2}\right)$

Domain: _____ Range: _____

Domain: _____ Range: _____

Amplitude: _____ Period: _____

Amplitude: _____ Period: _____

Vertical Shift _____ Phase shift _____

Vertical Shift _____ Phase shift _____