

Graphing Sine and Cosine with a Phase Shift
HW
Trigonometry
Algebra 2

Name _____

Hour _____ Date _____

For Question #1-3, graph each function. List the equation of the midline, domain, range, maximum(s), minimum(s), and midline intercepts.

1. $y = 2 \cos\left(\theta - \frac{\pi}{2}\right) + 1$

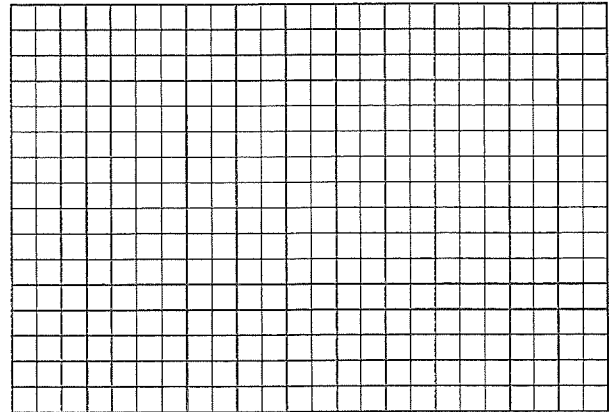
Midline Equation: _____

Domain: _____ Range: _____

Maximum(s) _____

Minimum(s) _____

Midline Intercepts _____



2. $y = \sin(\theta + 2\pi) - 2$

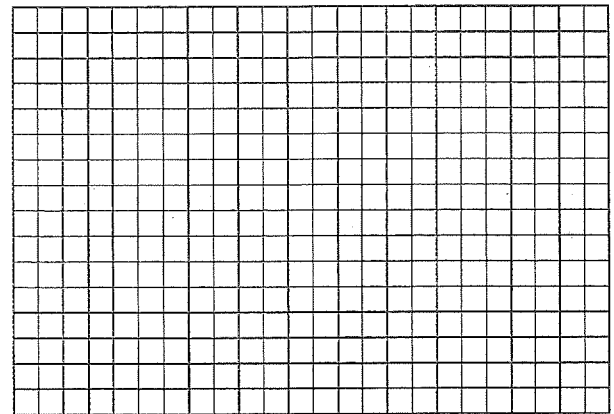
Midline Equation: _____

Domain: _____ Range: _____

Maximum(s) _____

Minimum(s) _____

Midline Intercepts _____



3. $y = -3 \cos\left(\theta + \frac{\pi}{4}\right)$

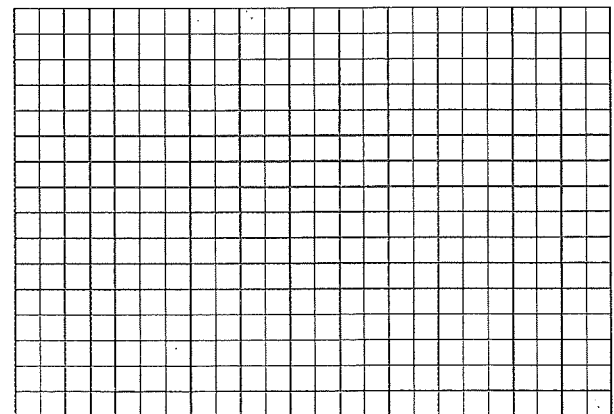
Midline Equation: _____

Domain: _____ Range: _____

Maximum(s) _____

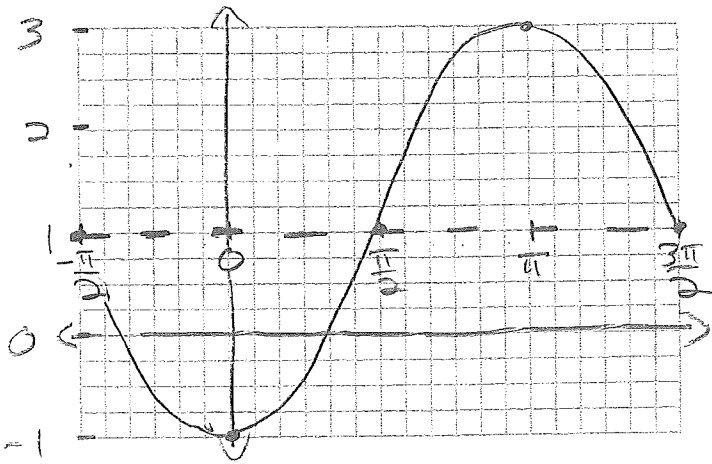
Minimum(s) _____

Midline Intercepts _____



4. Write the equation for each function graphed below. It will help to identify the key information for the graph first: Type, Sign (+/-), Phase Shift, & Vertical Shift.

a.



Vertical Shift _____

Type _____

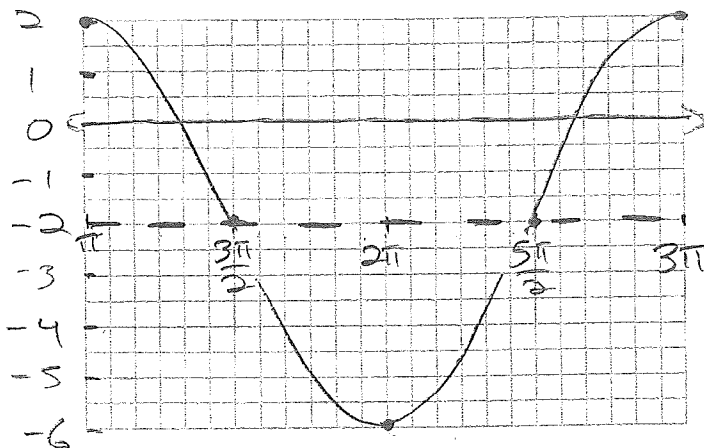
Sign (+/-) _____

Phase Shift _____

Amplitude _____

Equation _____

b.



Vertical Shift _____

Type _____

Sign (+/-) _____

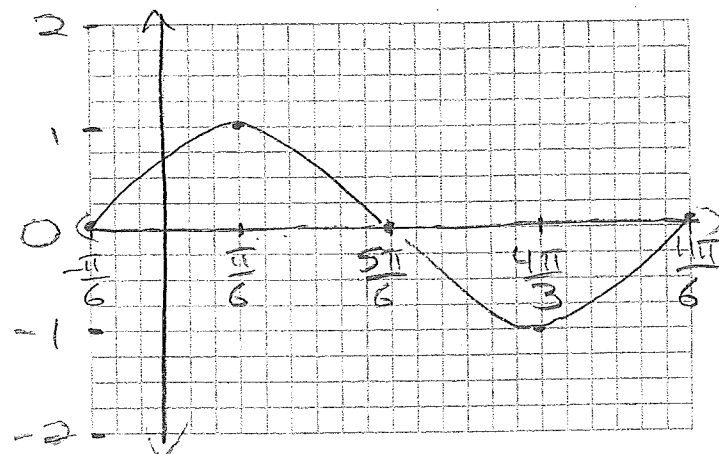
Phase Shift _____

Vertical Shift _____

Amplitude _____

Equation _____

c.



Vertical Shift _____

Type _____

Sign (+/-) _____

Phase Shift _____

Vertical Shift _____

Amplitude _____

Equation _____