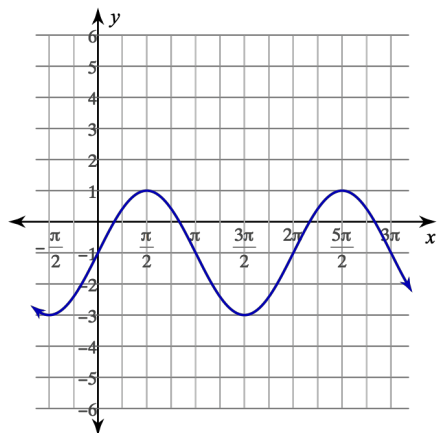


### 10.2 HW: Amplitude and Midline of Sine and Cosine

Determine whether each graph is sine or cosine. Identify the amplitude and midline. Write an equation for the function.

1.



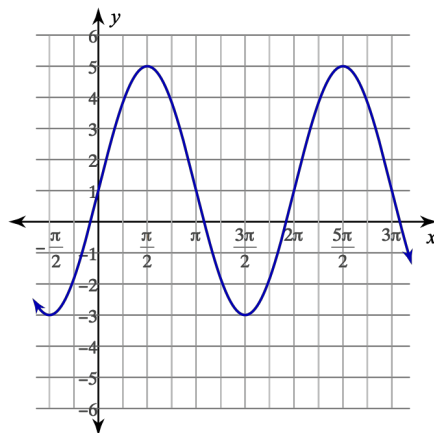
Sine/Cosine? \_\_\_\_\_

Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

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

2.



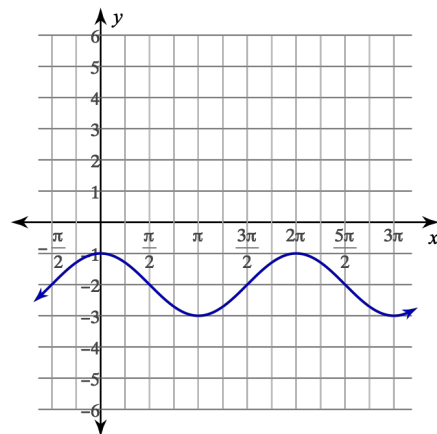
Sine/Cosine? \_\_\_\_\_

Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

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

3.



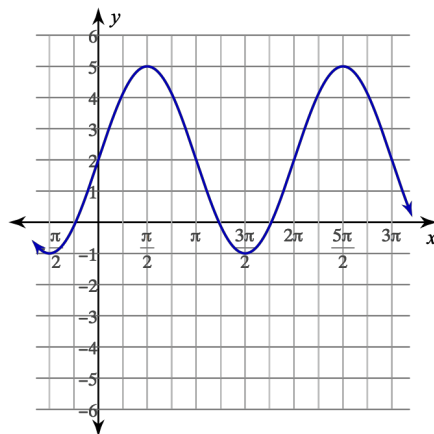
Sine/Cosine? \_\_\_\_\_

Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

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

4.



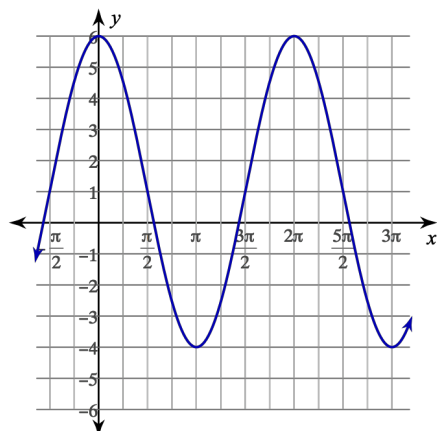
Sine/Cosine? \_\_\_\_\_

Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

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

5.



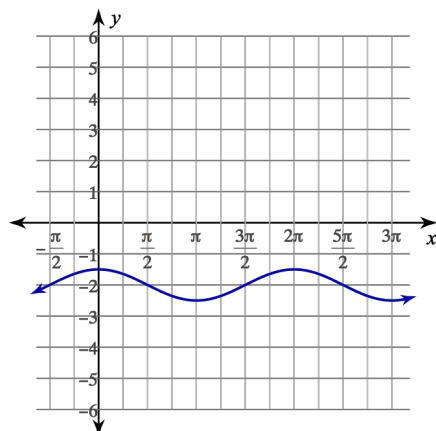
Sine/Cosine? \_\_\_\_\_

Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

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

6.



Sine/Cosine? \_\_\_\_\_

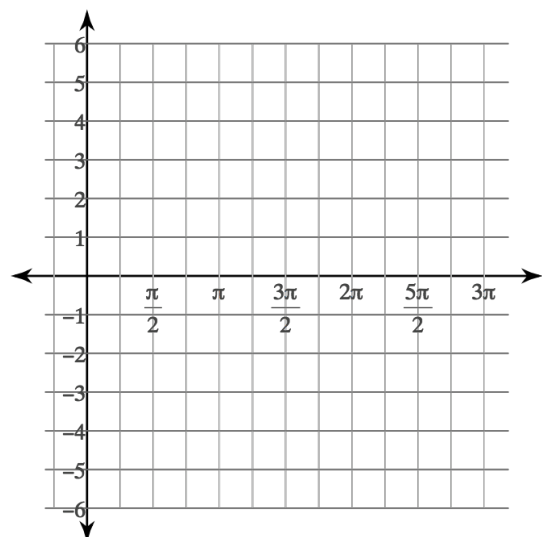
Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

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

Sketch the graph of each function. State the amplitude and midline.

7.  $y = 4\sin \theta + 2$



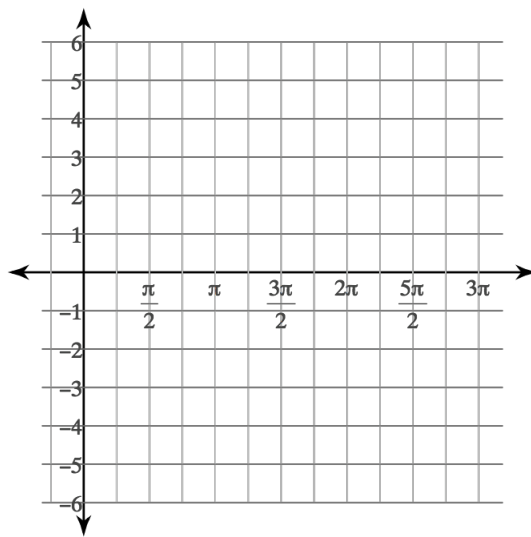
Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

8.  $y = \cos \theta + 2$



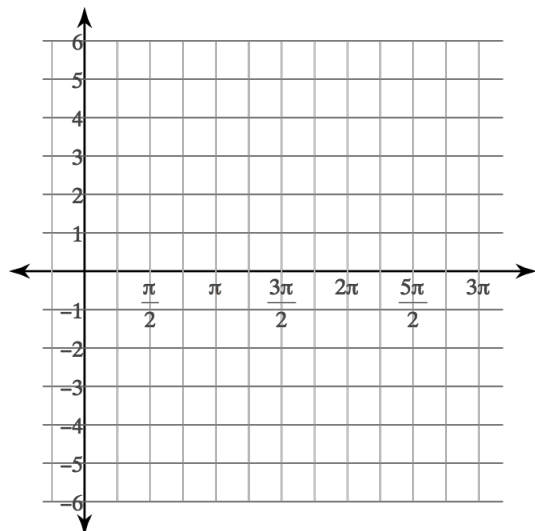
Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

9.  $y = 2\sin \theta + 1$



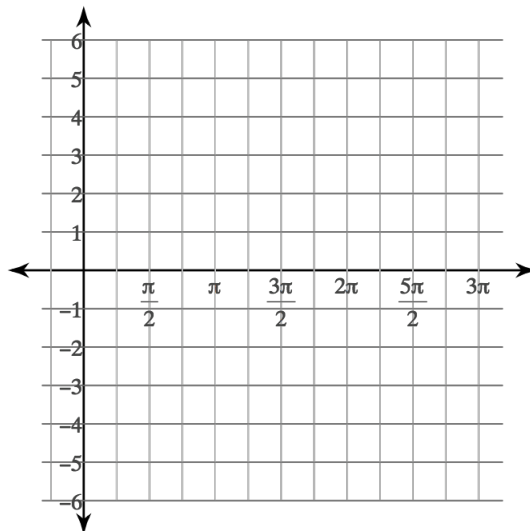
Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

10.  $y = 4\cos \theta$



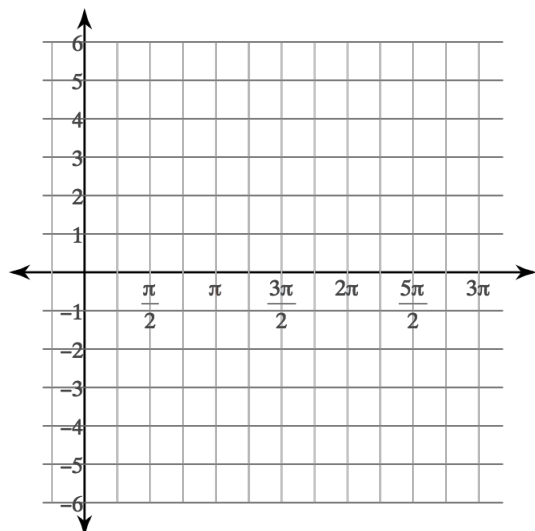
Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

11.  $y = 3\cos \theta - 1$



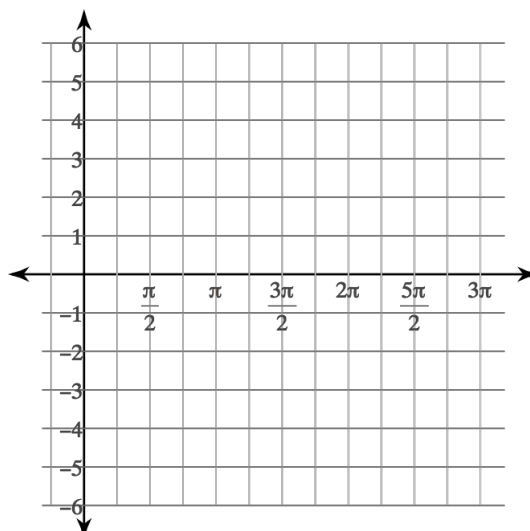
Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

12.  $y = 3\sin \theta - 2$



Amplitude: \_\_\_\_\_

Midline: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

(

STOP!