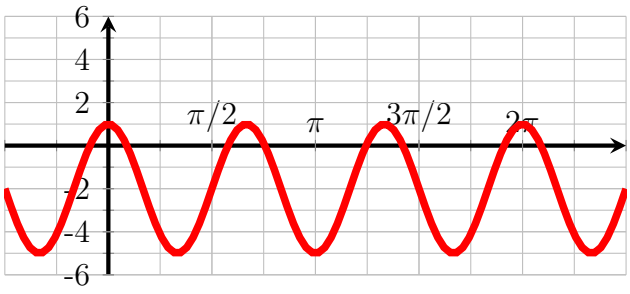
Parts of Periodic Graphs

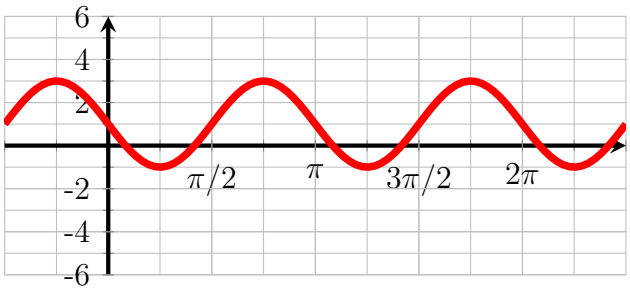
1. For the periodic graphs below, identify the midline, amplitude, period, and frequency. Assuming there is no phase shift, identify whether the function is $\pm\sin$ or $\pm\cos$.



Midline = ____ Amplitude = ____

Period = ____ Frequency = ____

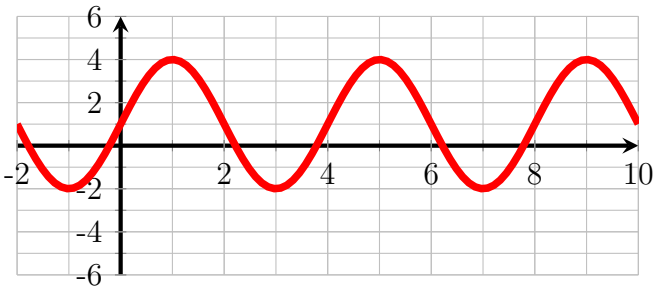
Trig Function = ____



Midline = ____ Amplitude = ____

Period = ____ Frequency = ____

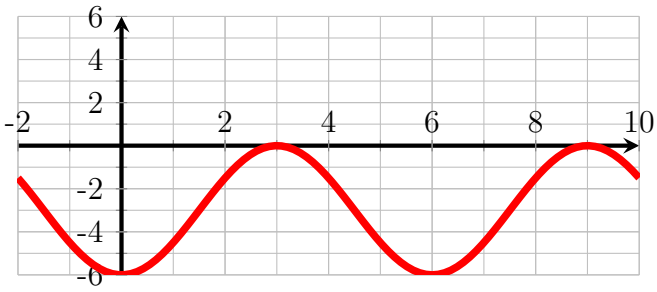
Trig Function = ____



Midline = ____ Amplitude = ____

Period = ____ Frequency = ____

Trig Function = ____

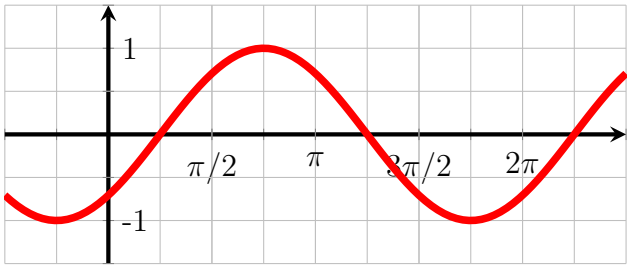


Midline = ____ Amplitude = ____

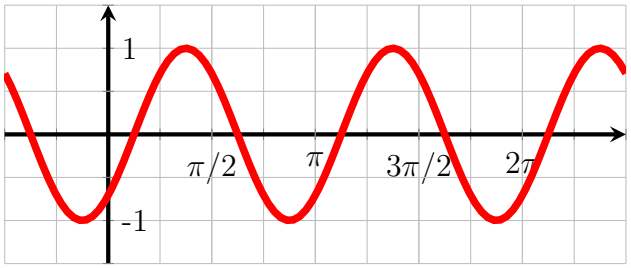
Period = ____ Frequency = ____

Trig Function = ____

2. For the periodic graphs below, identify the phase shift and frequency assuming the function is sin

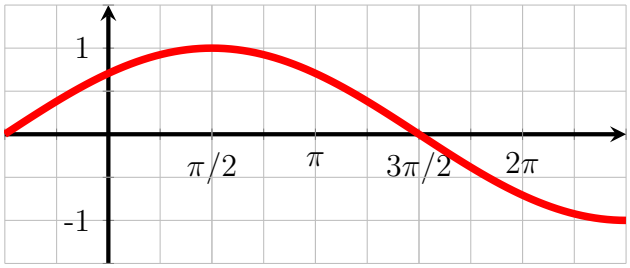


Phase shift = ☐ Frequency = ☐

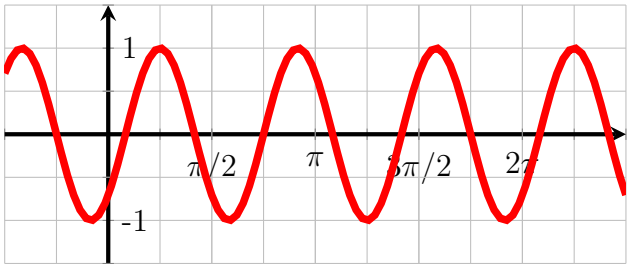


Phase shift = ☐ Frequency = ☐

3. For the periodic graphs below, identify the phase shift and frequency assuming the function is cos



Phase shift = ☐ Frequency = ☐



Phase shift = ☐ Frequency = ☐

4. For the formulas below, identify the midline, amplitude, period, frequency, and phase shift.

(a) $3 - 2\sin\left(5(x - \frac{\pi}{6})\right)$

Midline = ☐ Amplitude = ☐

Period = ☐ Frequency = ☐

Shift = ☐

(b) $-2 + 4\cos\left(3(x - \frac{\pi}{4})\right)$

Midline = ☐ Amplitude = ☐

Period = ☐ Frequency = ☐

Shift = ☐

(c) $-1 + 4\sin\left(2x - \frac{\pi}{3}\right)$

Midline = ☐ Amplitude = ☐

Period = ☐ Frequency = ☐

Shift = ☐

(d) $4 - 8\cos\left(3x + \pi\right)$

Midline = ☐ Amplitude = ☐

Period = ☐ Frequency = ☐

Shift = ☐