

Today's Learning Goal(s):

Date: _____

By the end of the class, I will be able to:

- a) sketch sinusoidal functions using transformations.

Last day's work: pp. 383-385 #1 – 4 [12]

6.5 Using Transformations to Sketch Sinusoidal Functions Day2

Ex. 1 Sketch (one cycle) for:

$$y = -3\cos(2x - 90^\circ) - 1$$

Date: _____

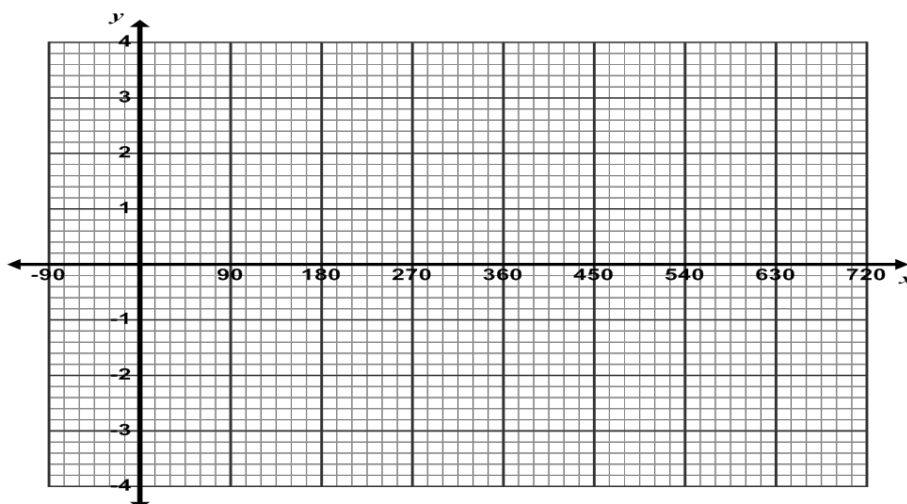
amplitude:

period:

phase shift:

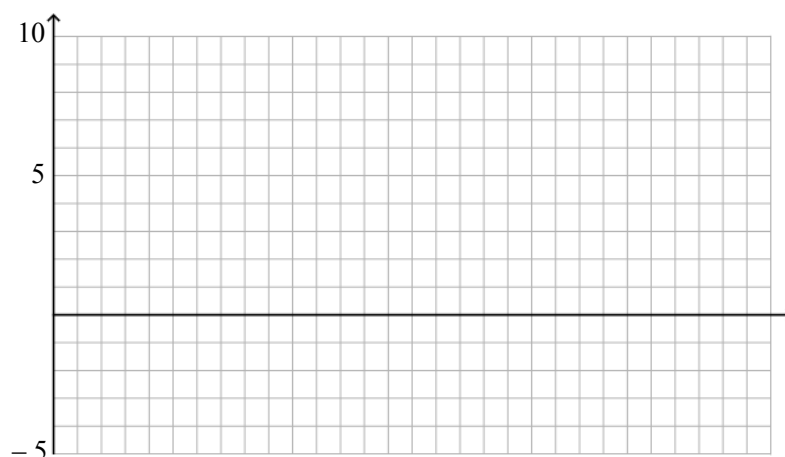
equation of the axis:
(vertical shift)

range:



Ex. 2

A water wheel turns. The height of a nail at the circumference of the wheel is given by $h = 5\sin(12t)^\circ + 1$. Graph the function.



(if time)

Ex. 3 Ron gets on a ferris wheel.

The radius of the wheel is 12 m and he starts 1 m off the ground.

The wheel takes 3 minutes to go around.

Determine the equation for Ron's height in terms of the time.



6.2 SineTracer.gsp