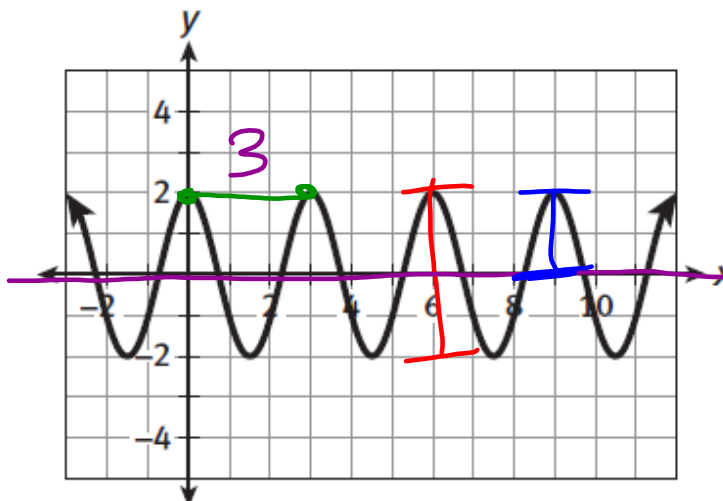


Warm Up: Pre-Calc

Rabbit, Rabbit, Rabbit 2/3

State the period,
amplitude and
midline.

$$y = 0$$



Feb 27-7:39 AM

W.A.L.T.:

Apply our understanding of the transformations of functions to explain the behavior of the periodic function, $f(x) = \sin x$.

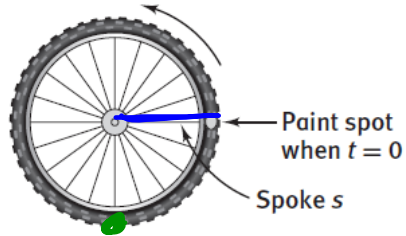
W.A.S.I.:

We can apply changes in the graph and context to translate the period, amplitude and midline of periodic functions such as $f(x) = \sin x$.

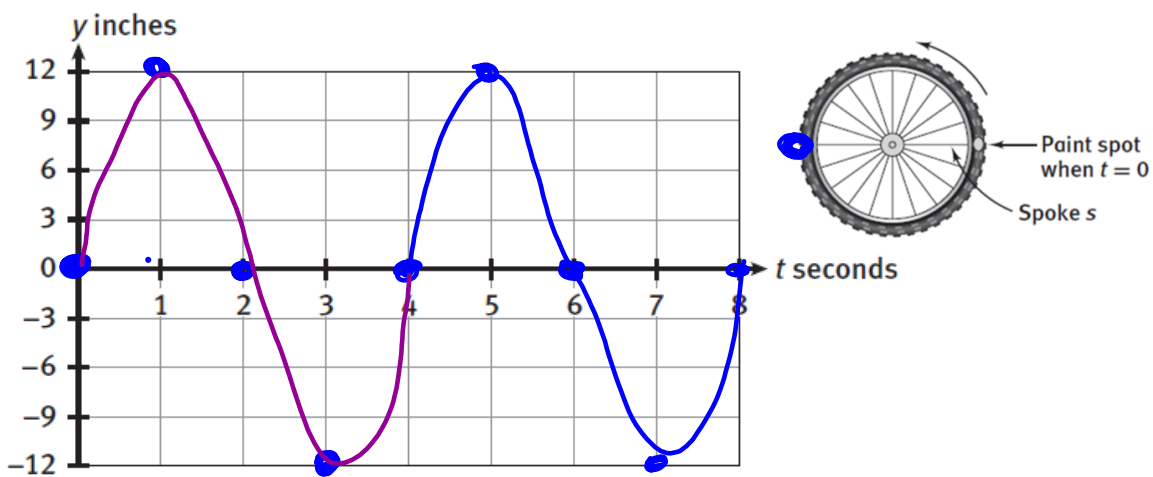
Mar 7-9:45 AM

In Class Work: pg. 208 #2

2. Suppose that the height of the paint spot is measured as a vertical distance above or below the center of the 24-inch wheel and that the paint mark starts at a point on the same horizontal line as the center of the wheel at $t = 0$. Suppose also that the wheel turns in the direction shown by the arrow in the figure at the same rate as before (one revolution in 4 seconds). Draw a graph of the height of the spot as a function of time for $0 \leq t \leq 8$.



Mar 7-1:33 PM

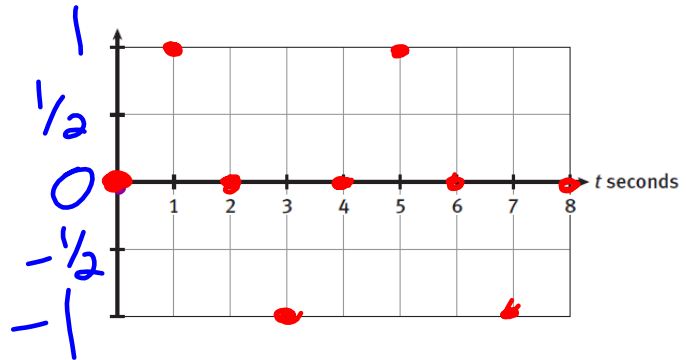


Jan 14-10:47 AM

In Class Work: pg. 209 #3

3. What happens if the unit of measure is feet rather than inches? Copy the graph in Item 2 and label the axes to illustrate the change.

Explain what this means in term of the vocabulary of periodic functions.



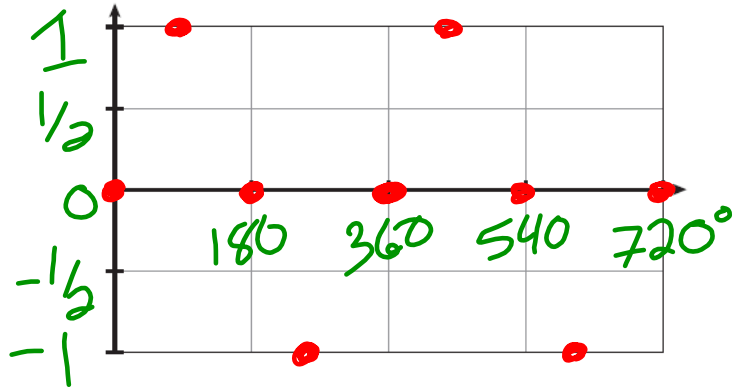
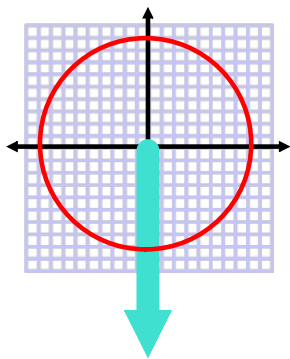
Mar 7-1:33 PM

In Class Work: pg. 209 #4

4. Instead of defining the function as height versus time, consider defining it as the height of the paint spot in feet versus the angle of rotation, measured in degrees, of spoke s . Through how many degrees will the spoke rotate in 8 seconds? Copy the graph in Item 3 and label both axes to reflect the change.

Mar 7-1:33 PM

as the height of the paint spot in feet versus the angle of rotation, measured in degrees, of spoke s . Through how many degrees will the spoke rotate in 8 seconds? Copy the graph in Item 3 and label both axes to reflect the change.



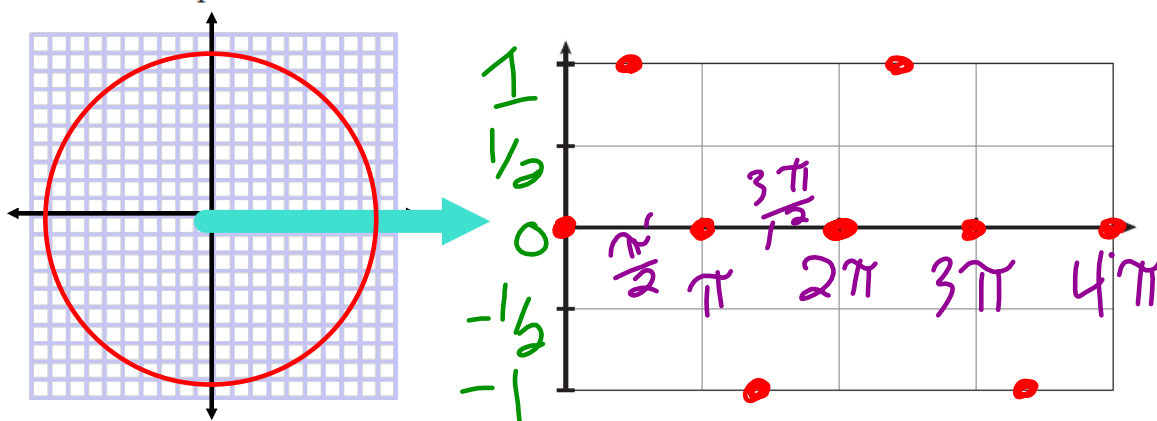
Jan 14-10:50 AM

In Class Work: pg. 209 #5

Copy the graph from Item 4 and label the axes so that the graph illustrates the height of the paint spot, in feet, as a function of the angle of rotation of spoke s , measured in radians.

Mar 7-1:33 PM

Copy the graph from Item 4 and label the axes so that the graph illustrates the height of the paint spot, in feet, as a function of the angle of rotation of spoke s , measured in radians.



Jan 14-11:12 AM

Today's Activities:

- Defining the sine function pg. 208-9 #2 - 5

P.W. for tonight:

- pg. 211 #9

Feb 27-7:23 AM