

Daily Agenda

Learning Target: I can graph sine and cosine functions with changes to amplitude and period.

<p>Today</p> <p>Mastery Quiz Graphing Notes Circuit</p>	<p>Homework</p> <p>8.2 Worksheet</p> <p>Assessments</p> <p>Unit Circle Mastery 8.1 to 8.2 Quiz - No Calc</p>
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Today you are you, that is truer than true. There is no one alive that is youer than you. - Dr. Suess

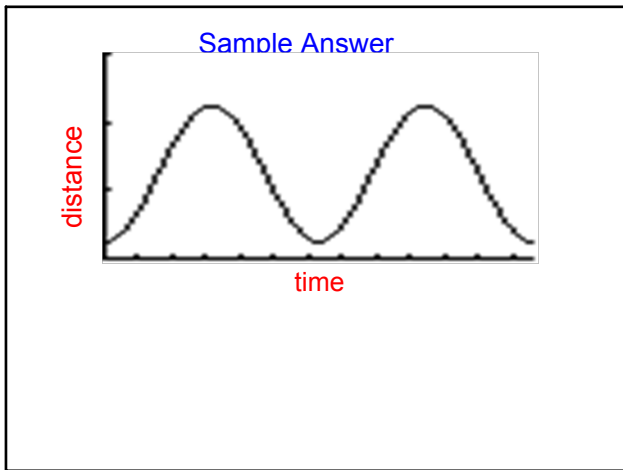
Nov 15-8:24 PM

8.2 Periodic Functions

periodic function

- y-values repeat at regular intervals
- “As you ride the ferris wheel, your distance from the ground depends on how long you’ve been riding.” Sketch a graph to illustrate.

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8.2 Graphing Trig Functions

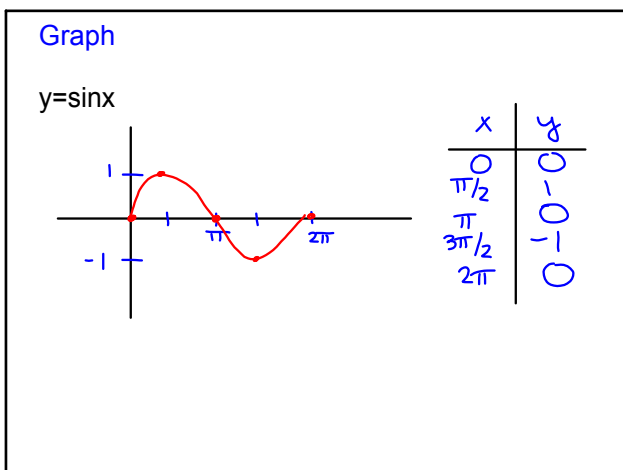
trig function

$y = \cos\theta$, critical points are angles ($0^\circ, 90^\circ, 180^\circ, 270^\circ, 360^\circ$)

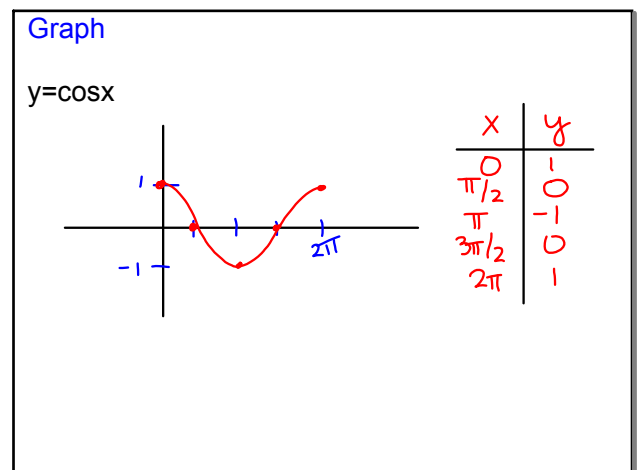
circular function

$y = \cos x$, critical points are radians $0, \frac{\pi}{2}, \pi, \frac{3\pi}{2}, 2\pi$

Feb 27-7:48 AM



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$y = A \sin B(x)$

amplitude
 distance from middle to high or low point (always positive).
 $A = \text{amplitude}$ (always positive)

period
 the length of one cycle. how often the graph repeats.
 $2\pi/B = \text{period of } \sin x \text{ or } \cos x$
 (divide period into 4 equal increments)

Mar 5-7:10 AM

Graph

$y = 2 \sin 4x$

$A = 2$
 $P = \frac{2\pi}{B}$

$\frac{2\pi}{4} = \frac{\pi}{2} = P$

x	y
0	0
$\pi/8$	2
$\pi/4$	0
$3\pi/8$	-2
$\pi/2$	0

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Graph

$y = 4 \cos \pi x$

$A = 4$ $P = \frac{2\pi}{\pi} = 2$

x	y
0	4
$1/2$	0
$3/2$	0
2	4

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