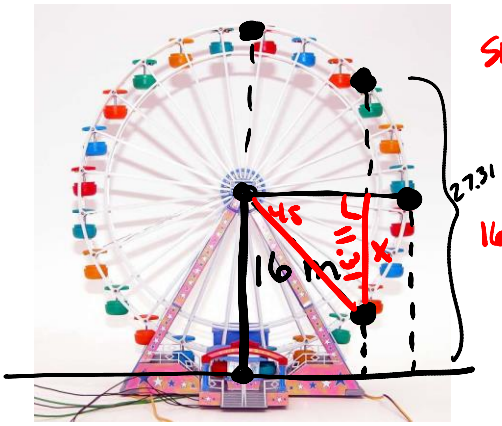
Name Key Date_____ Hour_____

Section 14.1 INTRO

Graphing Trig Functions – Day 1

Suppose you are on a Ferris wheel. You get on at the bottom. Graph your height with respect to the number of degrees you have traveled.

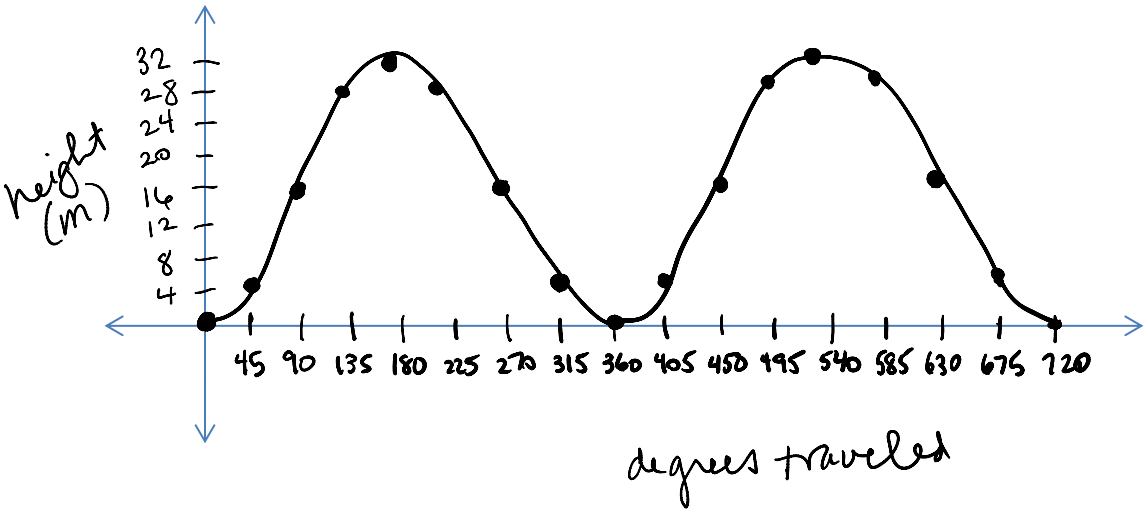


$\sin 45 = \frac{x}{16}$

$x = 11.31$

$16 - 11.31 = 4.69$

degrees	distance from ground
0	0
45°	4.69
90°	16
135°	27.31
180°	32
225°	27.31
270°	16
315°	4.69
360°	0

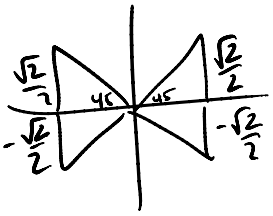


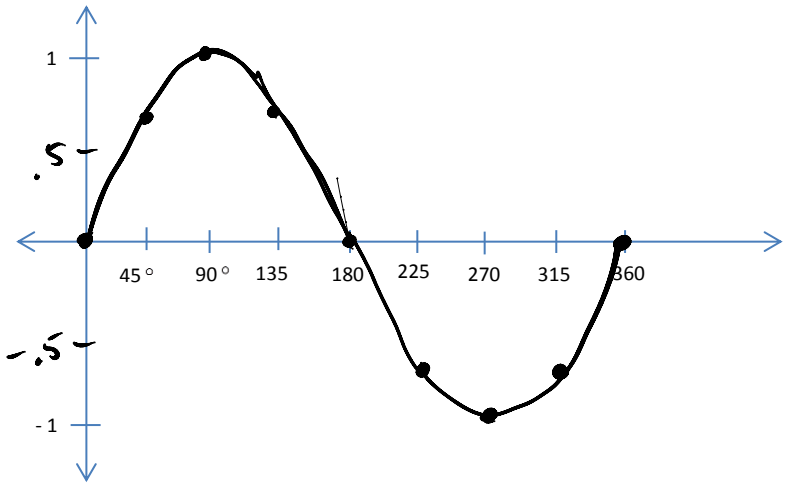
The ***PERIOD*** of a function is "how long" it takes for the function to make one full "rotation."

What is the **period** of the Ferris Wheel problem? 360°

Graph

$y = \sin x$

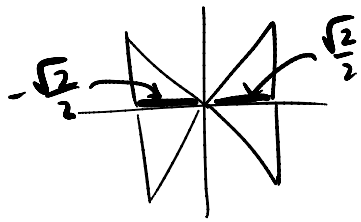


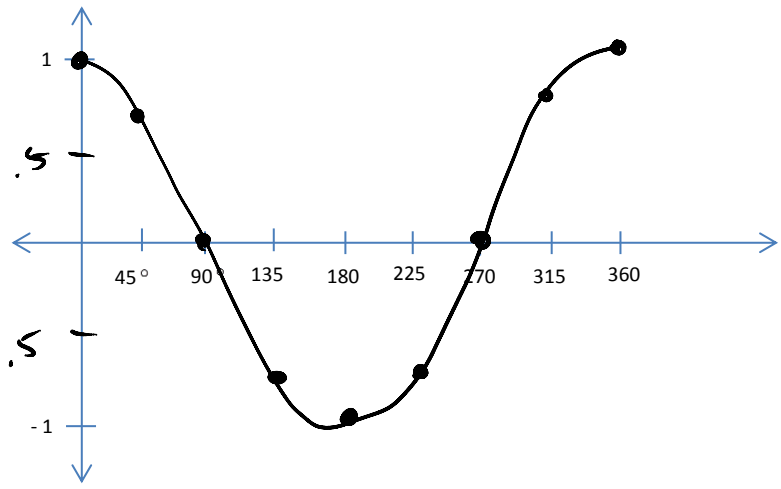


X	sin X
0	0
45°	.71
90°	1
135°	.71
180°	0
225	-.71
270°	-1
315	-.71
300°	0

Graph

$y = \cos x$





X	cos X
0°	1
45°	.71
90°	0
135°	-.71
180°	-1
225°	-.71
270°	0
315°	.71
360°	1