

HW Questions ?

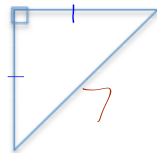
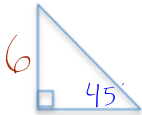
HW Tally →

Pick Up
the
Mini Warm Up
and purple sheet

Geometry Again! Find length of x

In a $45^\circ 45^\circ 90^\circ$ right triangle, hypotenuse is equal to $\sqrt{2}$ times the length of the each leg.

In a $30^\circ 60^\circ 90^\circ$ right triangle, hypotenuse is 2 times the length of the base and the longer leg is $\sqrt{3}$ times the length of the short leg.

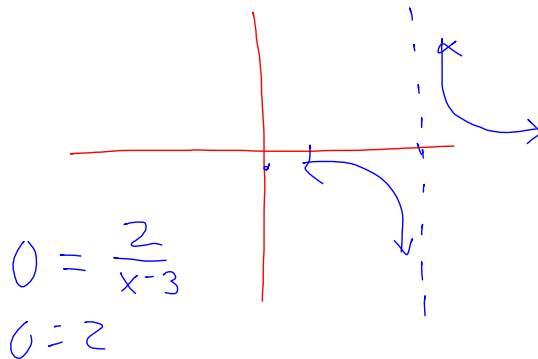


from the
textbook

7-4. Karin was working on graphing the function $f(x) = \frac{2}{x-3}$. She made a table (shown below), but she is not sure how to graph the values in the table. Show Karin how to make her graph and tell her everything you know about her function. [7-4 HW eTool](#) (Desmos) [Homework Help](#)

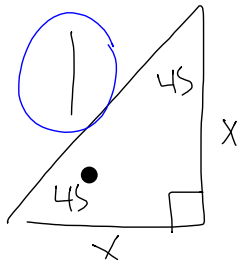
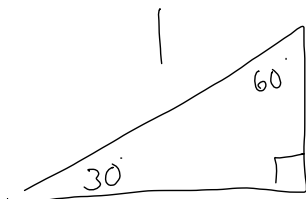
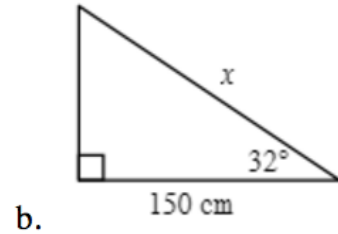
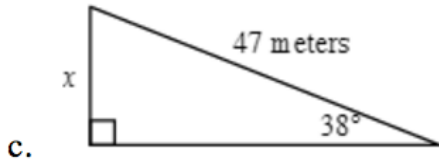
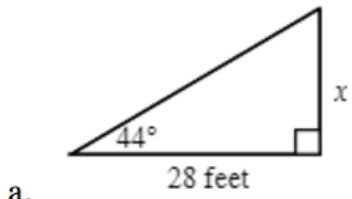
x	-3	-2	-1	0	1	2	3	4	5	6	7	8	9
$f(x)$	$-\frac{1}{3}$	$-\frac{2}{5}$	$-\frac{1}{2}$	$-\frac{2}{3}$	-1	-2	*	2	1	$\frac{2}{3}$	$\frac{1}{2}$	$\frac{2}{5}$	$\frac{1}{3}$

*undefined



1. Asympt. at $x=3$
 2 branches
 No x -int
 y -int $\frac{2}{3}$

7-5. In each of the following triangles



$$x^2 + x^2 = 1$$

$$2x^2 = 1$$

$$x^2 = \frac{1}{2}$$

$$x = \sqrt{\frac{1}{2}}$$

$$x = \frac{\sqrt{1}}{\sqrt{2}}$$

$$\frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$$

$$\frac{\sqrt{2}}{2}$$

7-9. Consider the function $y = x^2 + 5x + 7$. [7-9 HW eTool](#) (Desmos). [Homework Help](#)

- Complete the square to find the vertex. $y =$
- Find the y-intercept.
- Use the vertex, the y-intercept, and the symmetry of parabolas to find a third point and sketch the graph.

$$y = x^2 + 5x + 7$$

$$y - 7 = x^2 + 5x +$$

$$\left(\frac{5}{2}\right)^2 = \frac{25}{4}$$

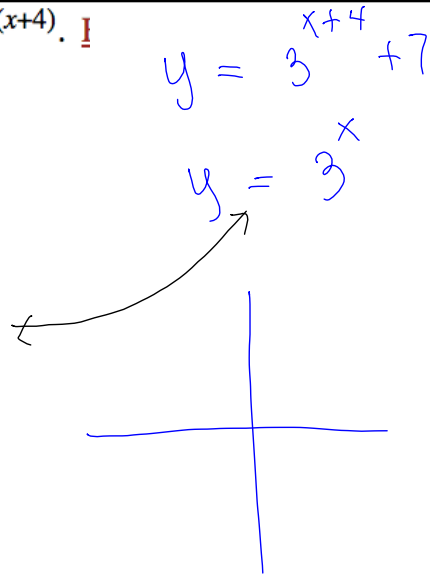
7-10. Find the x - and y -intercepts of $y - 7 = 3^{(x+4)}$. !

$$y = 0 \quad \xrightarrow{x+4}$$

$$0 - 7 = 3^{x+4}$$

$$-7 = 3^{x+4}$$

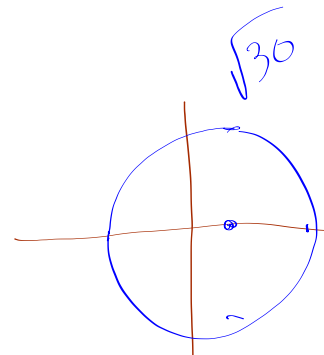
$$x+4 = \log_3(-7)$$

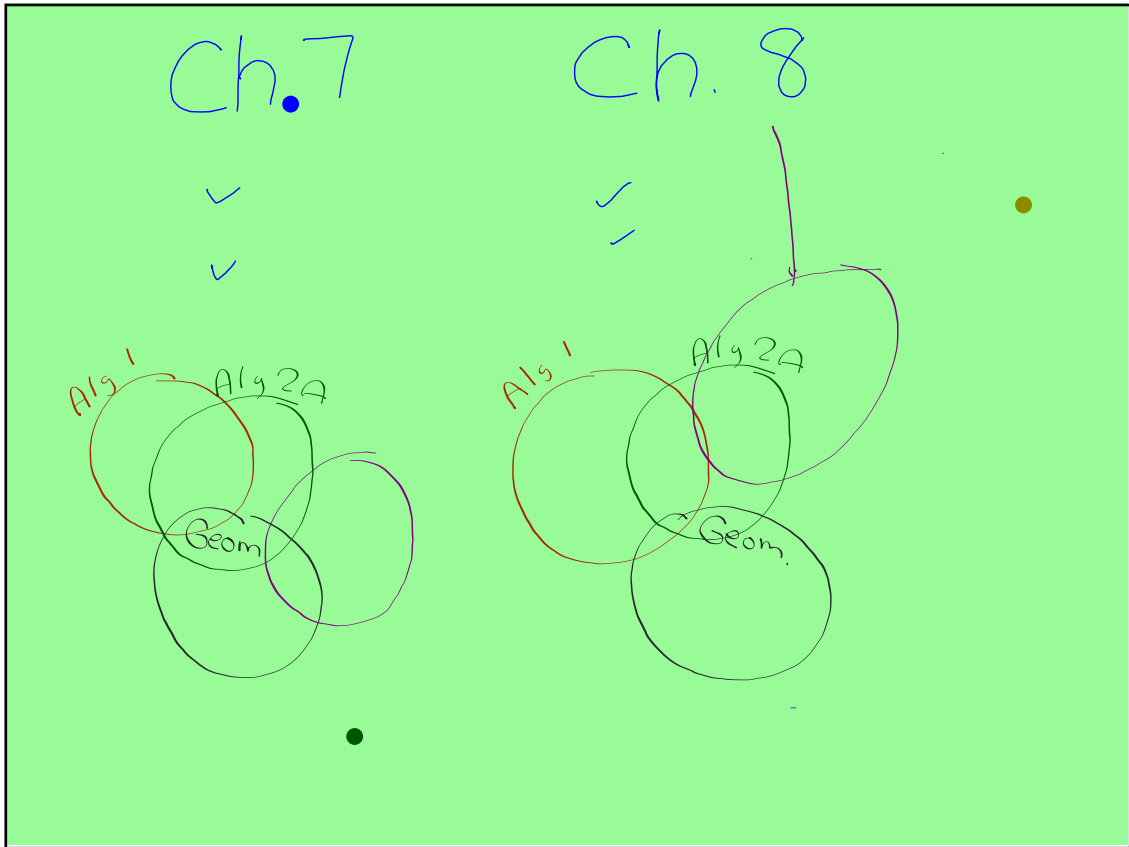


7-11. Change $x^2 - 2x + y^2 - 29 = 0$ to graphing form, sketch the graph, and label the important points. [Homework Help](#)

$$x^2 - 2x + 1 + y^2 = 29 + 1 \quad \left(\frac{-2}{2}\right)^2 = 1$$

$$(x-1)^2 + y^2 = 30$$



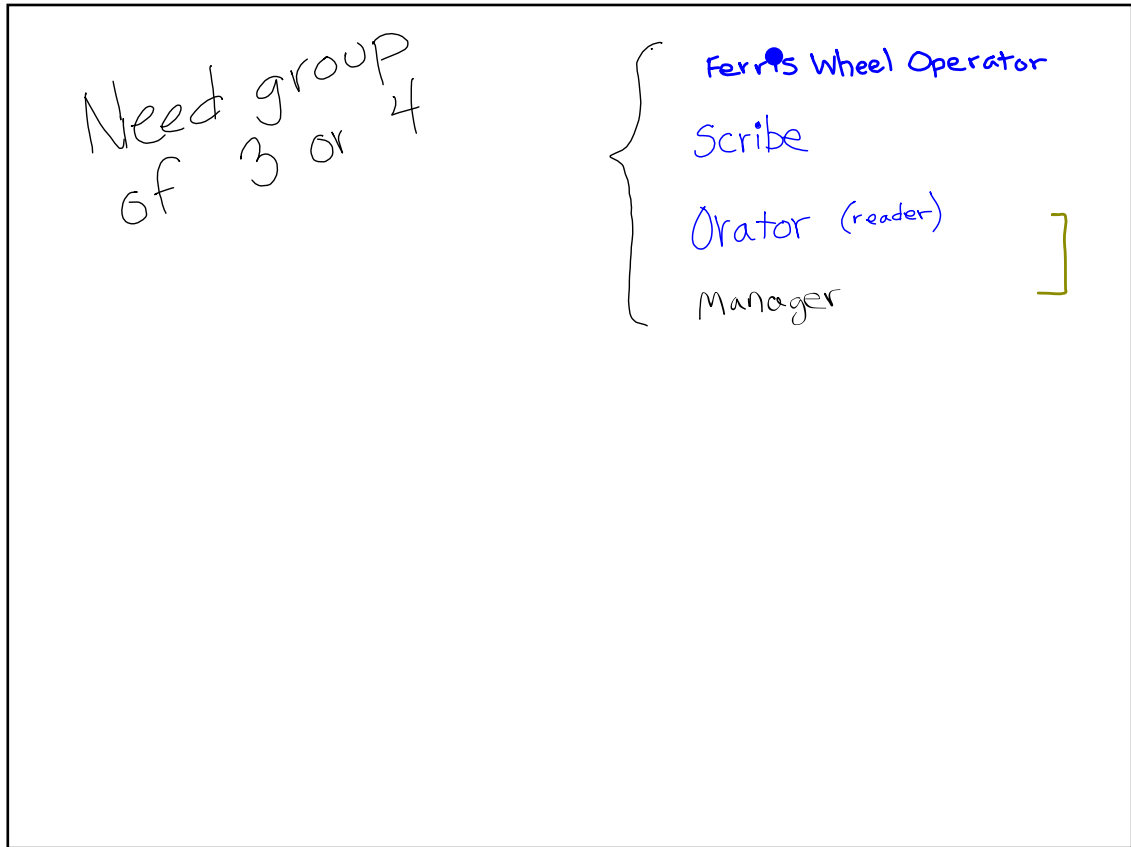


Today

Collect data that is
periodic (cyclic)

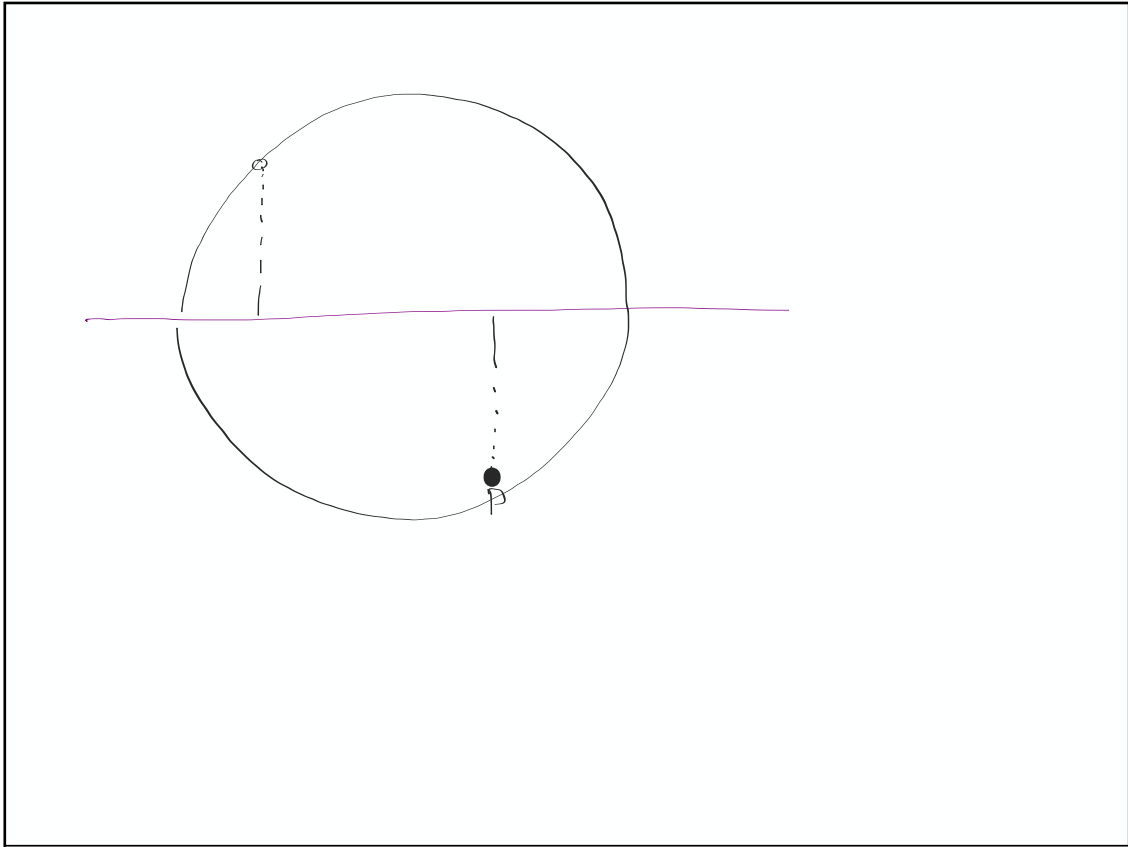
(to create a new
parent function)





Everyone Turn to page 317

Orators get
ready



Face two desks together.

All group members stand on one side.

Scribes — pick up a recording sheet

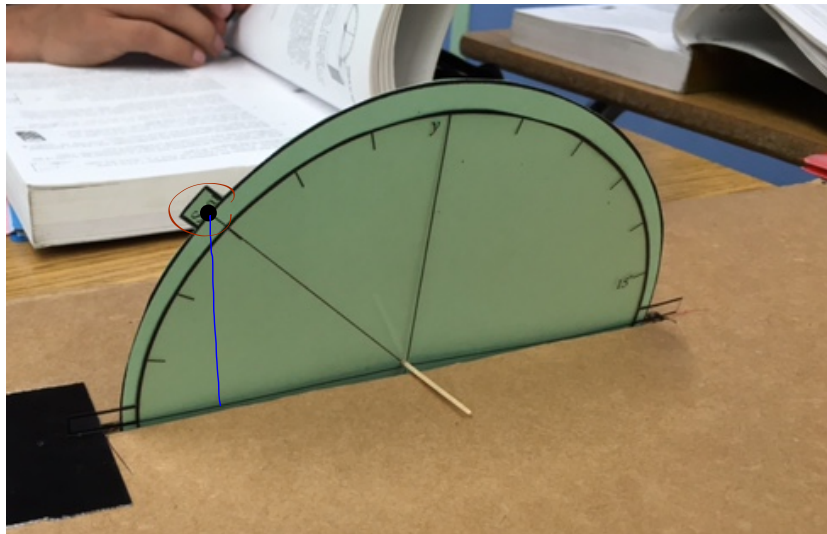
Ferris
Wheel
operator — Pick up a transparent ruler and a
cardboard base from me.

Huddle #1

Scribes

Degree of Rotation (Platform)	Measured Height $0 \leq y \leq 1$	Actual Height Above(or below) Platform include negatives	
0°			

Huddle with Operators



data geeks to measure

follow instructions on 7-12
for a, b, c

(Manager) → be looking ahead to see what is next.

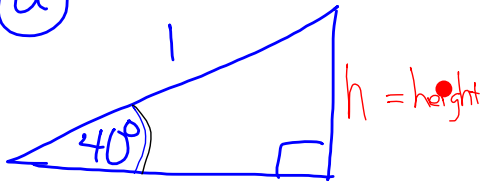
At least one person in your group, or more, should start entering your data in your GDC.

Next

Do 7-13

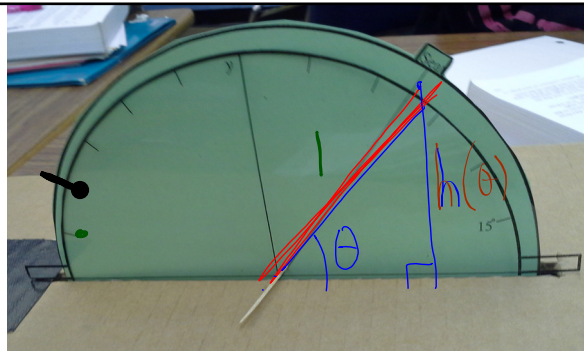
Each of you in your own notes

a)

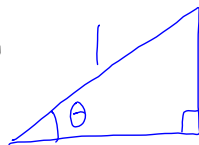


$$\sin(40^\circ) = \frac{h}{1}$$

$$h = \sin(40^\circ) \approx .64$$



b)



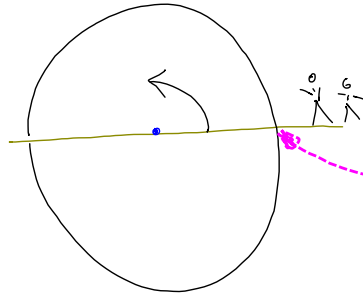
$$\sin(\theta) = \frac{h(\theta)}{1}$$

$$h(\theta) = \sin(\theta)$$

NOTES

For the next several weeks you will be given problems that refer to the screamer.

Three things
to
remember



100 foot radius

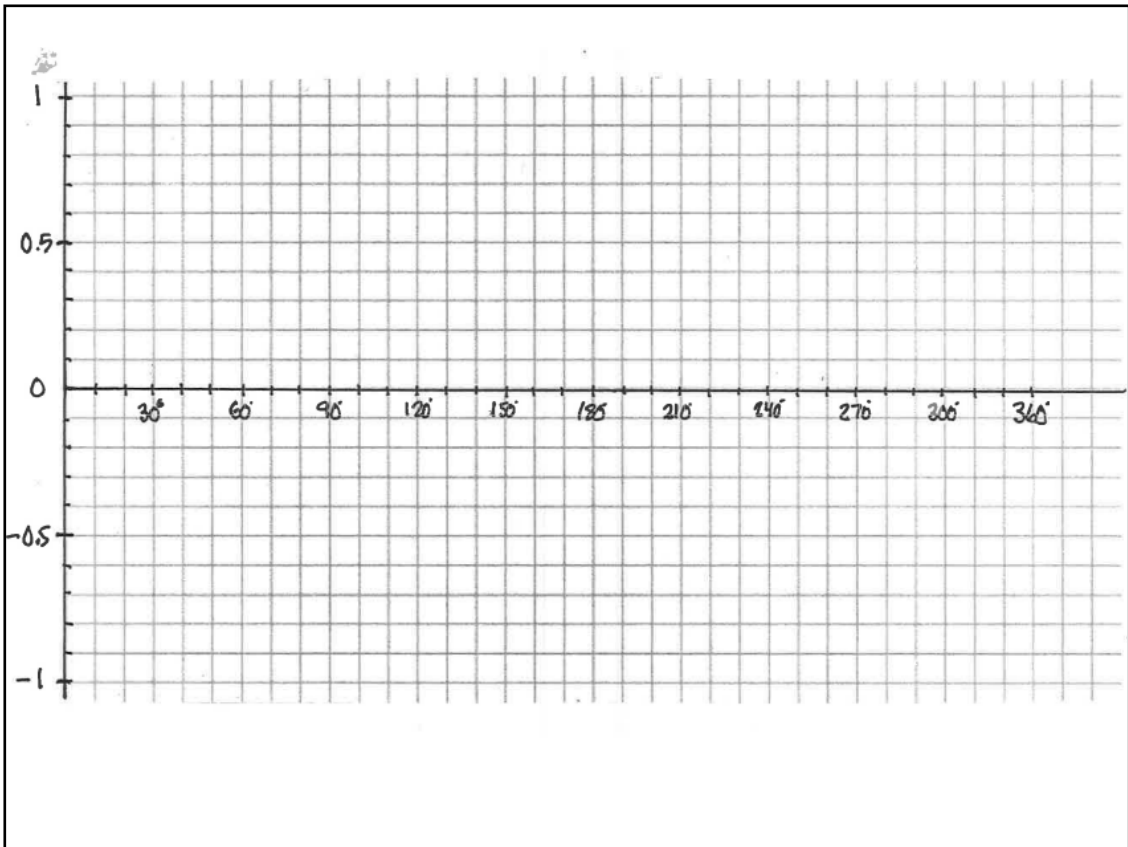
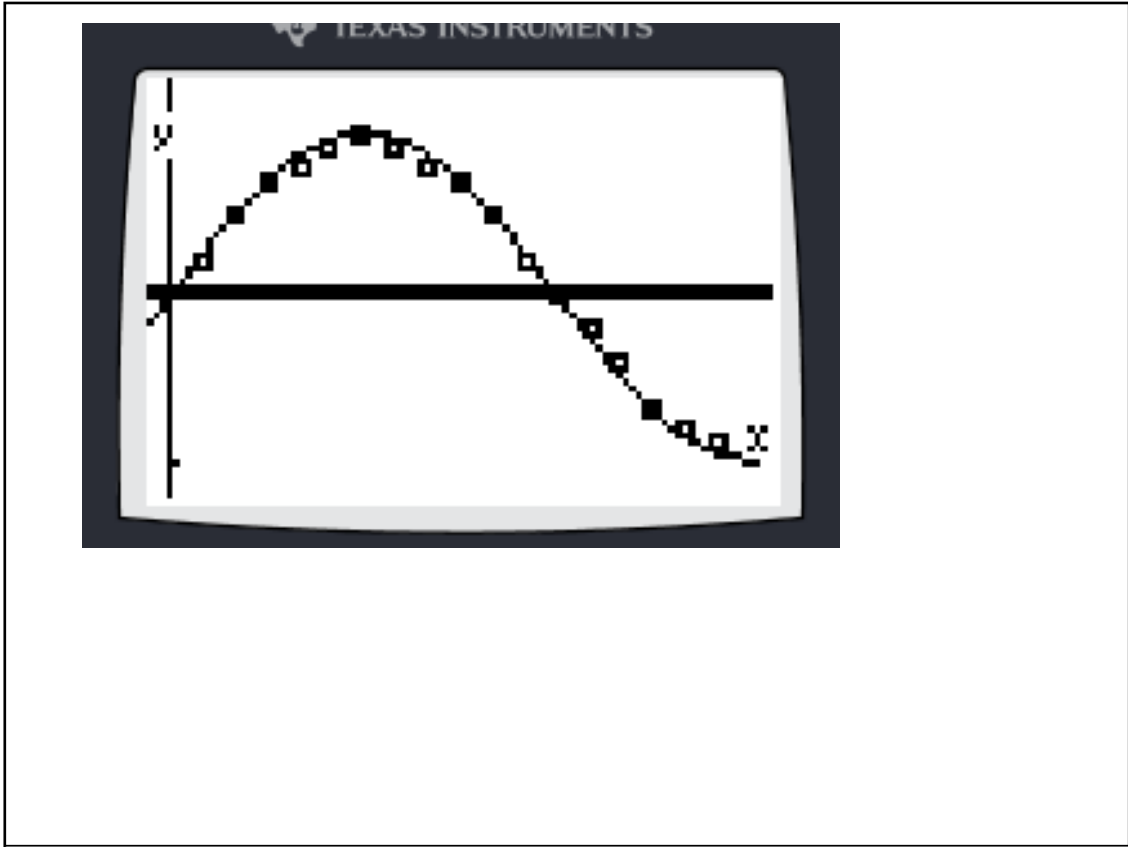
Starting point
at ground level

Screamer
rotates
counter-clock.

© Enter data
in GDC

f

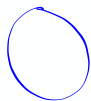
April 30, 2019



Next class:

- ★ We'll continue to Analyze this data.
- ★ Staple your table on top of your graph. Write all of your names on top. Turn in.

Game	Shower	Baggage
Diner	Engine	Club
Caboose	Man	Staff



Assignment:

7....15-16, 18-20, 22-23

do 21 for extra fun
(optional challenge)



Yes, I do want you
to do #23