Minds on Math...

Minds on Math...Mathematical Models

1) What does it mean to *model* with mathematics?

http://blog.ted.com/8-math-talks-to-blow-your-mind/

2)

4)

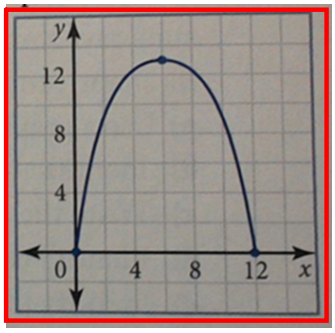
3)

How is this mathematical modeling?
Could it be mathematical modeling?

Minds on Math...Another Mathematical Model

Next

Label the graph shown.



(0, 0)

(6, 13)

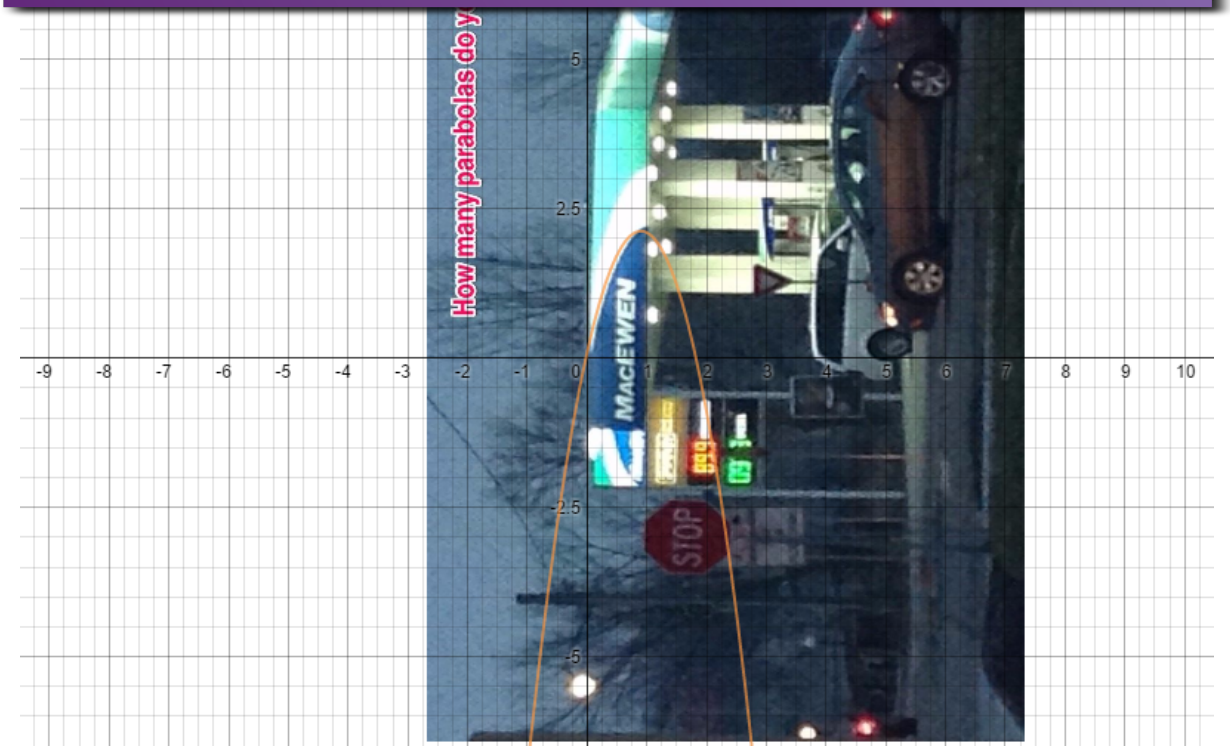
x = 6

Pull

maximum

(12, 0)

Minds on Math...Modelling with Desmos



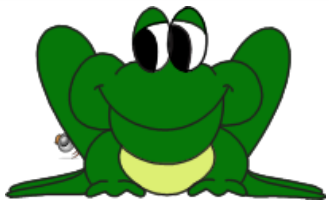
https://www.desmos.com/calculator/nkkugxljez

Take Action...Let's Model with Data!

<u>The Frog Game</u> (Instructions)

Scenario 1

- 3 chairs, 1 frog per side



Number of Frogs/Side	Number of Moves
1	

Scenario 2

- 5 chairs, 2 frogs per side

Number of Frogs/Side	Number of Moves
2	

Link to Puzzle

Scenario 3

- 7 chairs, 3 frogs per side

Number of Frogs/Side	Number of Moves
3	

Link to Puzzle

Data Table

Number of Frogs/ Side	Number of Moves
1	3
2	8
3	15
4	24

Next Steps

What could you do with the data in this table?

- ⇨
- ⇨
- ⇨

Data Table

Number of Frogs/ Side	Number of Moves
1	3
2	8
3	15
4	24
5	35

1st: 5, 7, 9, 11

2nd: 2, 2, 2

Quadratic.

Next Steps

What could you do with the data in this table?

- graph the data and label with key terms from this unit ⇨
- calculate the differences to classify as linear or quadratic ⇨
- use technology to come up with an equation ⇨

Exit Ticket

Complete a "Voicethread".

First, register (free) at ...

https://voicethread.com/register/?ReturnUrl=%2Fmyvoice%2F%23

- **link is in your school email**