LESSON 1

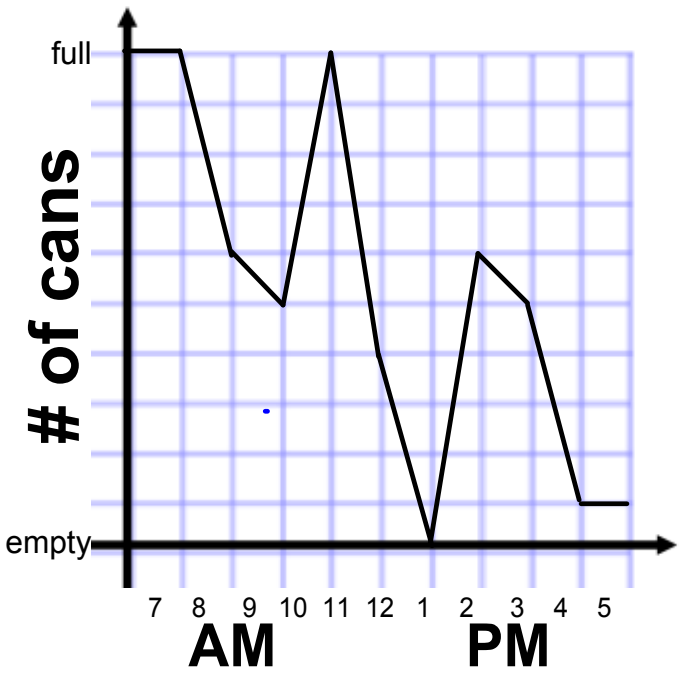
Transformations Unit

I can interpret graphs that model real world scenarios.
I can identify functions and use function notation

SIT IN YOUR NEW ASSIGNED SEATS!!!

Interpreting Graphs

Story
Independent/Dependent variables
Y-intercept meaning



Your turn...

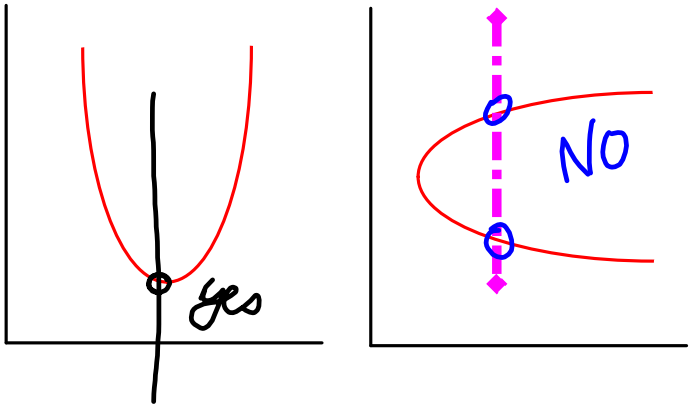
With your partner or group make up a story about your graph.
Be sure to discuss the independent and dependent variables
and the meaning of the y-intercept.

Function Notation

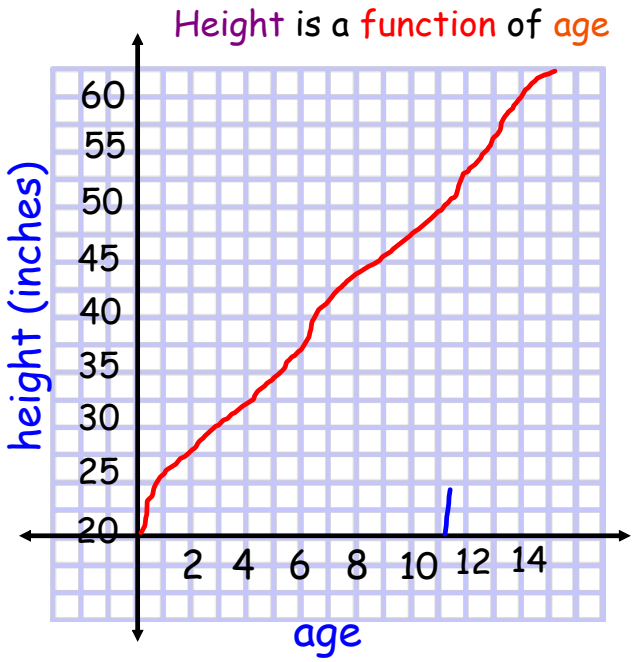
Relation Any relationship between two variables

Function A relationship between two variables such that for every value of the independent variable, there is at most one value of the dependent variable.
(for every **x** there is only **one y**)

Vertical Line Test



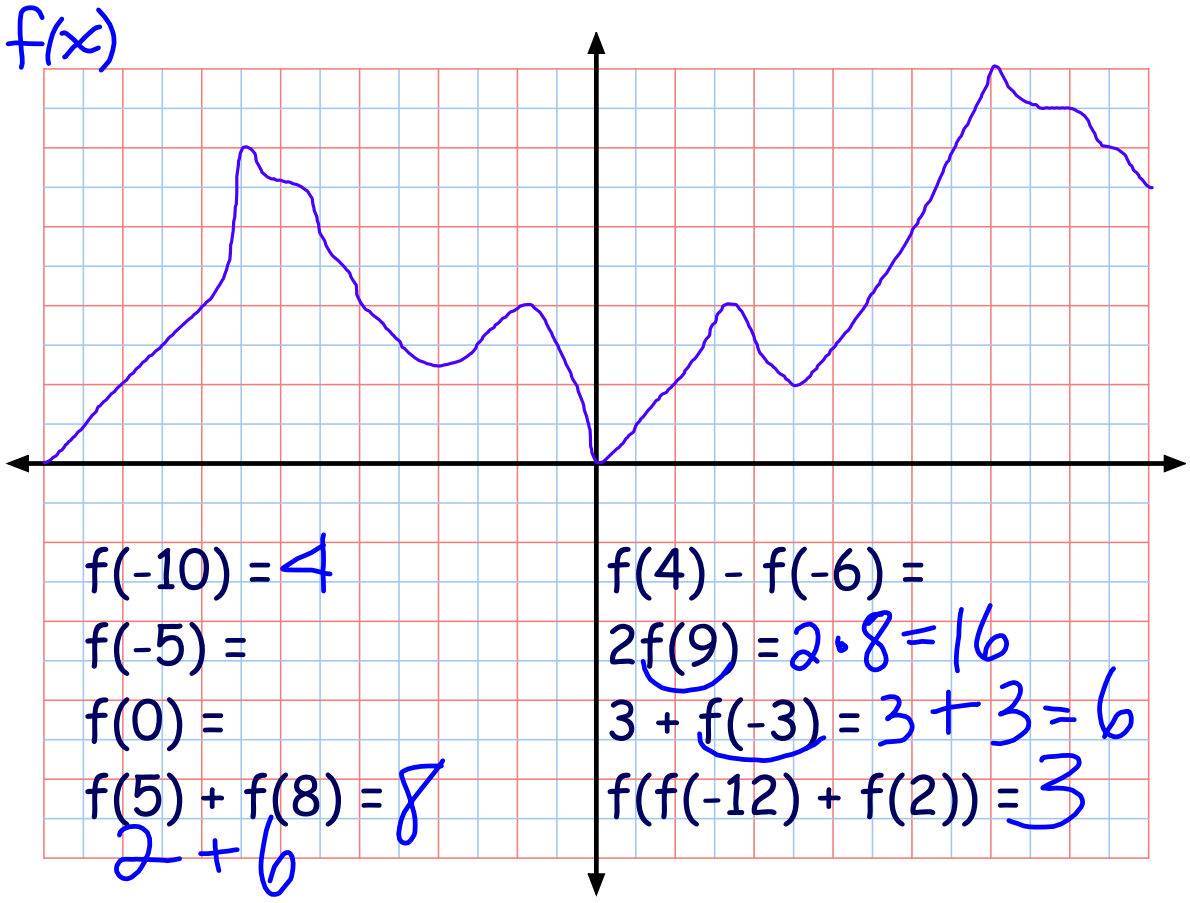
y = f(x) Read as..."y equals f of x"



f(6)=37in

f(x) = 50in

X=11



f(-10) = 4

f(-5) =

f(0) =

f(5) + f(8) = 8

2 + 6

f(4) - f(-6) =

2f(9) = 2·8 = 16

3 + f(-3) = 3 + 3 = 6

f(f(-12) + f(2)) = 3

Let's think of this an easier way.

Instead of thinking in numbers, let's think in blobs!

$f(x) = x^2 + 5$ $f(x+h) = (x+h)^2 + 5$

find $f(x + h)$

$f(\text{blob}) = (\text{blob})^2 + 5$

This function takes any blob...squares it...then adds 5! Like...

$f(\text{iPod}) = (\text{iPod})^2 + 5$

$f(\text{☺}) = (\text{☺})^2 + 5$

Answer

$f(x) = 3(x)^2 - 2(x)$ what is $f(x+h)$?

$f(x+h) = 3(x+h)^2 - 2(x+h)$

$f(x) = 3x^2 + 2x$

Find $f(-3)$

Find $5 + f(-7)$

Homework

Transformation WS #1