DATE 9/3/14

1.1.2: How does it grow?

Lesson # and Question

Problems Assigned: p. 7) 1-9 to 1-12

Key words

Notes + Classwork

CORNELL NOTES CLASSWORK

Key words: factors, direct variation, exponential, inverse variation, Why doesn't the graph touch ∅?

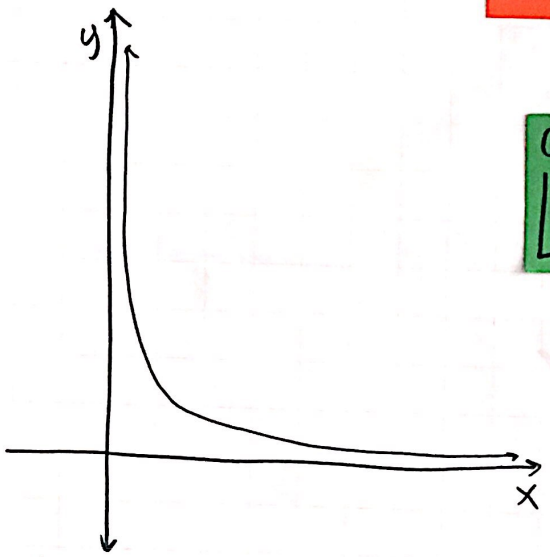
Vocab

questions?

1-9)(a) Perry, hot tub, 36 square tiles

factors of 36? 1 x 36, 2 x 18 ...

x	y
1	36
2	18
3	12
4	9
6	6
9	4
12	3
18	2
36	1



ON THE LEFT

inverse variation means the same as inversely proportional where if the value of x-increases, y-decreases and vice versa.

Summary

Non-linear graphs take many different forms! Now I know when people say "exponentially" it means a lot! In the case of the flu problem, growing at a rate of tripling each day!

1.2.2, HW Day 2

Lesson and HW number

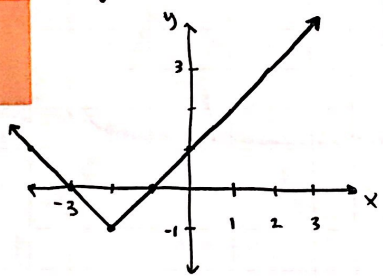
Page # and Problems → p. 23) 1-47 to 1-51

Working Vertically ↓

1-47 Answer questions about the graph $y = |x+2| - 1$

VERTICAL HALF-PAGE FORMAT HOMEWORK

ON THE RIGHT →



U-shaped graph, opening upwards. As x-increases, y decreases from left to right until $x = -2$, then y increases. x-intercepts: (-3,0) + (-1,0). y-intercept: (0,1). Minimum output of -1. Special point is vertex at (-2,-1). Line of symmetry is $x = -2$.

1-48 a) $|-4|-3 = \boxed{1}$

b) $|6-11+3| = \boxed{2}$

1-48 cont'd

c) $-9-|-2| = -9-(2) = -9-2 = \boxed{-11}$

d) $5|6|-2 =$ ← Write original question/equatio

$5(6)-2 = 30-2 = \boxed{28}$

1-49 Solve.

a) $3x+7 = -x-1$

$+x \quad +x$

$4x+7 = 0-1$

$4x+7 = -1$

$-7 \quad -7$

$\frac{4x}{4} = \frac{-8}{4}$

BOX ANSWERS → $\boxed{x=-2}$