9/8 Notes

QOB: 1c, 2c, 3b

warm up

1. whats true about the y-int? x=?
2. whats true about the x-int? y=?
3. 3.1 worksheet (odds)

goal

- understand slope & real world meaning
- $y=mx+b$

Topic: 3.2

- discuss independent vs dependent variable
- discuss domain (x-values) vs. range (y-values)

ex find the slope, remember the equation is $\frac{\Delta y}{\Delta x}=\frac{y_2-y_1}{x_2-x_1}$ where (x_1,y_1) (x_2,y_2)

(3,5) & (7,6)

(-5,-1) & (-6,3)

ex finding the y-intercept

#1 find slope

#2 plug point in & solve for b.

(3,6) & (5,10)

#1 $\frac{10-6}{5-3}=\frac{4}{2}=2$

$y=2x+b$

$10=2(5)+b$

$10=10+b$

$0=b$

$y=2x$. y-int. is (0,0)

slope-intercept form: $y = mx + b$

y: points on graph

m: slope

b: y-int.