9/22 Notes

QOB: 2b, c, d

warm up

1. what does absolute value mean?
2. solve for x
   a. $7|x-5| = 56$
   b. $\sqrt{x-3} = 9$
   c. $4 + 2(x-1)^2 = 204$

Topic: 4.1 describing graphs

- investigation on p186 "graph a story"
  * remind students to recognize plateaus/constant pieces

in word problems

$y = m \cdot x + b$

- m: continual amount i.e. fee, income, cost
- b: starting value beginning fee

- if time example A p184

HW15

Common misconceptions

- absolute value almost always has <u>two</u> solutions.

- $(x+1)^2 \neq x^2+1$ you cannot just square both you MUST foil.
  → but when solving for x do not foil, square root both sides

- do not distribute with abs. value, get it on it's own then solve.

  ex. $\frac{3|x-1|}{3} = \frac{12}{3}$

  $|x-1| = 4$

  $x-1=4$ $\quad$ $x-1=-4$

  $x=5$ OR $x=-3$