November 23rd

Due Today: 4.3 HW

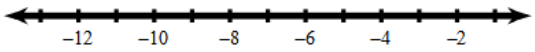
Unit 3: Inequalities

Lesson 4.4: Inequalities Functions + Review

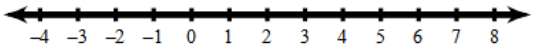
Get Ready:

Solve each compound inequality and graph its solution. *Special Cases*

11) $1 + 2n \geq 19$ or $8n + 3 \geq -53$



12) $3 + 9b > 5b + 7$ and $9b + 10 \leq 9b - 5$



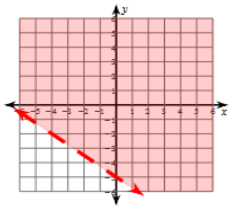
Aug 5-9:51 PM

Algebra 1 Name_____

4.3 HW Date_____

Sketch the graph of each linear inequality.

1) $y > -\frac{3}{4}x - 5$



2) Is the point (0,0) in the solution set of number one?

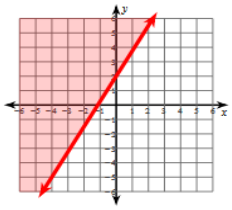
Give an example of a point IN the solution set:

Give an example of a point NOT in the solution set.

Are the points ON the line in the solution set?

Sketch the graph of each linear inequality.

3) $y \geq \frac{7}{4}x + 2$



4) Is the point (0,0) in the solution set of number three?

Give an example of a point IN the solution set:

Give an example of a point NOT in the solution set.

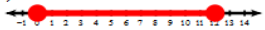
Are the points ON the line in the solution set?

Solve each compound inequality and graph its solution.

5) $2 + 2n \leq 8n - 10$ or $10n - 10 \leq 3 - 3n$

$n \geq 2$ or $n \leq 1$

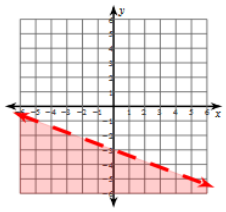
6) $2a - 4 \leq a + 8 \leq 5a + 8$



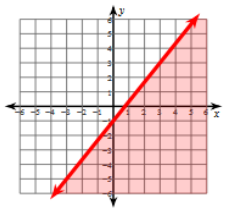
$0 \leq a \leq 12$

Sketch the graph of each linear inequality.

7) $y < -\frac{2}{5}x - 3$

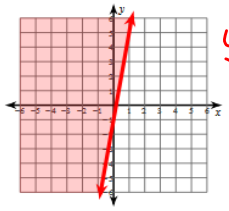


8) $y \leq \frac{4}{3}x - 1$



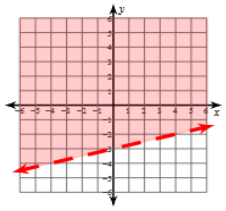
Solve each of the following inequalities for slope- intercept form and graph the solutions.

9) $6x - y \leq 1$



$y \geq 6x - 1$

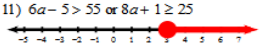
10) $x - 4y < 12$



$y > \frac{1}{4}x - 3$

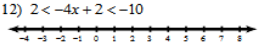
Solve each compound inequality and graph its solution. *Special Cases*

11) $6a - 5 > 55$ or $8a + 1 \geq 25$



$a \geq 3$

12) $2 < -4x + 2 < -10$



No solution.

$2 < -4x + 2 < -10$

$-2 \quad -2 \quad -2$

$\frac{0}{-4} > \frac{-4x}{-4} > \frac{12}{-4}$

$0 > x > 3$

$0 > x$ and $x > 3$

-2

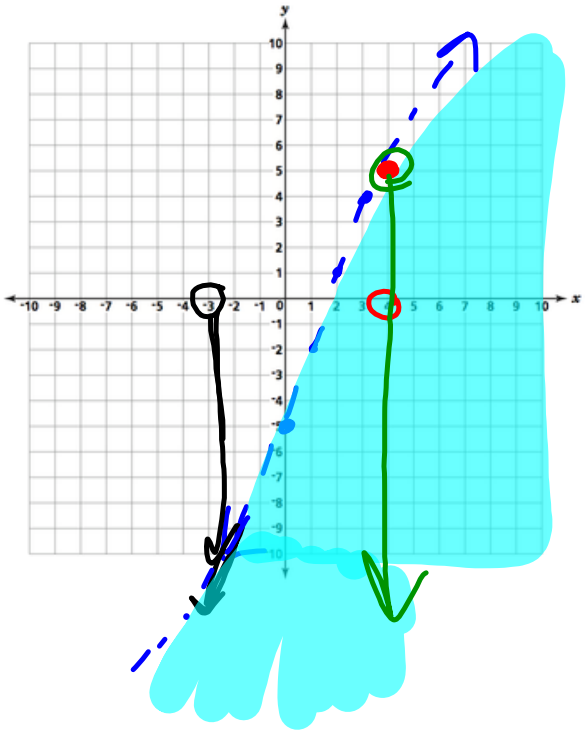
-50

5

10

Nov 20-9:58 AM

$f(x) < 3x - 5$



if x = -3 what is true about f(x)?

$f(x) < 3(-3) - 5$

$< -9 - 5$

$f(x) < -14$

if f(x) = 11 what is true about x?

$11 < 3x - 8$

$+8 \quad +8$

$\frac{19}{3} < \frac{3x}{3}$

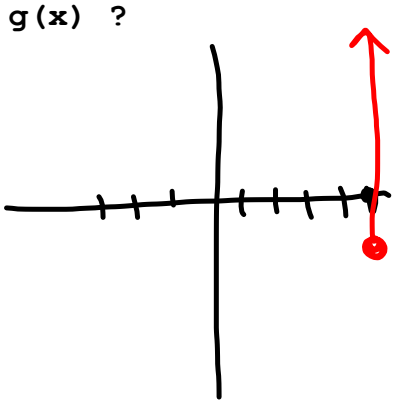
$\frac{19}{3} < x \approx 5.33 < x$

$g(x) \geq -x + 3$

if x = 5, what is true about g(x) ?

$g(x) \geq -5 + 3$

$g(x) \geq -2$



if g(x) = 0, what is true about x?

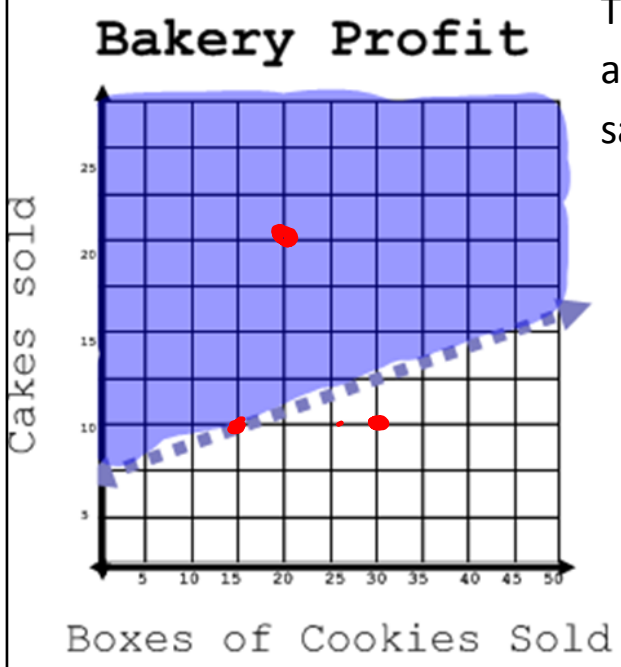
$0 \geq -x + 3$

$-3 \quad -3$

$-3 \geq -x$

$-1 \quad -1$

$3 \leq x$



The graph to the right shows the profits of a local profit in terms of cake and cookie sales.

a. Describe what the graph says.

b. If the bakery sells 20 boxes of cookies and 20 cakes, will it make a profit?

yes

c. If the bakery sells 10 cakes and 30 boxes of cookies, will it make a profit?

NO

d. If the bakery sells 15 boxes of cookies and 10 boxes of ~~cookies~~ cake, will it make a profit?

Nov 20-1:08 PM

Linear Inequalities and Modeling Worksheet

Nov 20-10:00 AM

Unit 4: Inequalities

Lesson #	Name	Recap	HW
4.1	Review of Basic inequalities		Delta Math 4.1 4.1 Modeling Sheet
4.2	Compound Inequalities		Finish all 11e problems
4.3	Linear Inequalities		
4.4	Functions + Review		finish 4.4 ReviewSheet
4.5	TEST		

Aug 8-7:55 PM

Mastery Topics:

(1) - one variable inequalities

(2) - two variable inequalities

(3) - Modeling w/ Inequalities

Nov 23-9:22 AM