Curriculum Outcomes:

(PR1) Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution.

(PR2) Graph linear relations, analyze the graph and interpolate or extrapolate to solve problems.

Student Friendly: Other forms of linear equations

$y = \frac{\Delta y}{\Delta x} x \pm \#$

Use a table of values to graph the following.

hint: must use your equation to determine the change in your x values

$\Delta x = 3$

$\Delta y = -2$

$y = \frac{2}{3}x - 5$

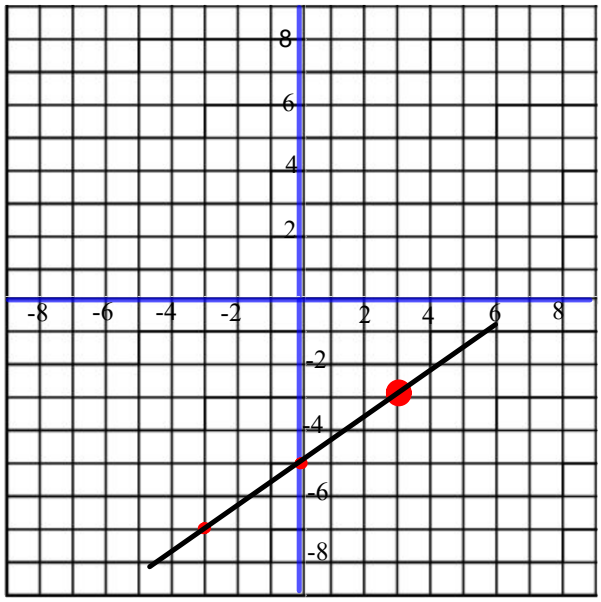
x= -3
$y = \frac{2}{3}x - 5$
$y = \frac{2}{3}(-3) - 5$
$y = -2 - 5$
$y = -7$

x= 0
$y = \frac{2}{3}x - 5$
$y = \frac{2}{3}(0) - 5$
$y = 0 - 5$
$y = -5$

x= 3
$y = \frac{2}{3}x - 5$
$y = \frac{2}{3}(3) - 5$
$y = 2 - 5$
$y = -3$

x	y
-3	-7
0	-5
3	-3

+3 (-3)) +2
+3 (3) +2



What did we do in chapter 6 when we saw denominators?

We got rid of them by using the LCM

$y = \frac{\Delta y}{\Delta x}x \pm$ ...

$$\frac{2}{5}x + \frac{1}{3}y = -2$$

(15) (15) (15)

$$6x + 5y = -30$$

6x 6x

$$5y = -6x - 30$$

$\frac{5}{5}$ $\frac{}{5}$ $\frac{}{5}$

$$y = \frac{-6}{5}x - 6$$

$\Delta y = -6$ $\Delta x = 5$

$\Delta y = -6$

$$y = \frac{-6x}{5} - 6$$

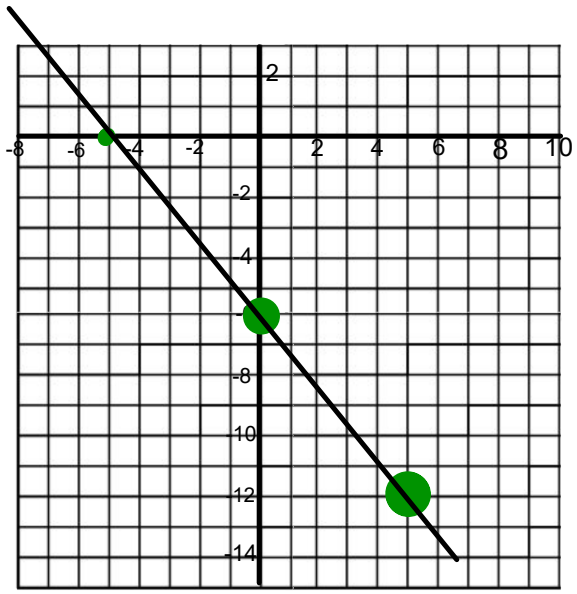
$\Delta x = 5$

$\Delta x = 5$

x	y	
-5	0	-6
0	-6	-6
5	-12	-6
10	-18	-6
15	-24	

$\Delta x = 5$

x = -5	x = 0
$y = \frac{-6x}{5} - 6$	$y = \frac{-6x}{5} - 6$
$y = \frac{-6(-5)}{5} - 6$	$y = \frac{-6(0)}{5} - 6$
$y = 6 - 6$	$y = 0 - 6$
0	$y = -6$



$$\frac{1}{3}x + \frac{1}{2}y = -3 \quad (6)$$

$y = \frac{\Delta y}{\Delta x} x \pm \#$

$$2x + 3y = -18 \quad (2x)$$

$$3y = -2x - 18$$

$$y = \frac{-2x}{3} - 6$$

$\Delta y = -2$

$\Delta x = 3$

$$y = \frac{-2x}{3} - 6$$

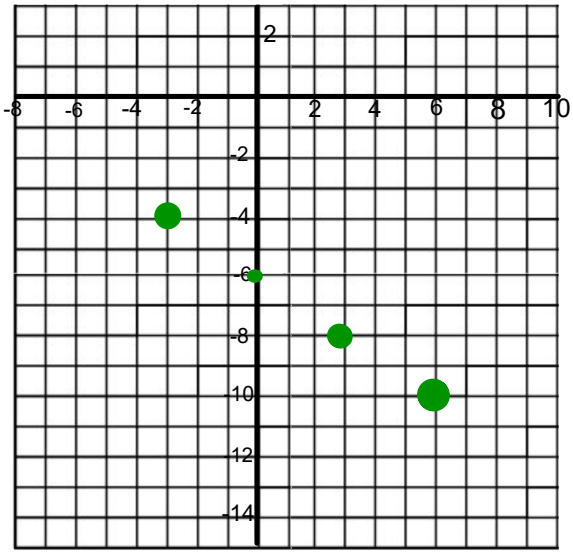
$\Delta x = 3$

$\Delta y = -2$

x	y
-3	-4
0	-6
3	-8
6	-10
9	-12

$\Delta x = 3$

x= -3	x= 0
$y = \frac{-2x}{3} - 6$	$y = \frac{-2x}{3} - 6$
$y = \frac{-2(-3)}{3} - 6$	$y = \frac{-2(0)}{3} - 6$
$y = 2 - 6$	$y = 0 - 6$
$y = -4$	$y = -6$



$$-\frac{5}{6}x - \frac{1}{4}y = 2 \quad (12)$$

$y = \frac{\Delta y}{\Delta x} x \pm H$

$$-10x - 3y = 24 \quad +10x$$

$$-3y = 10x + 24$$

$$\frac{-3y}{-3} = \frac{10x}{-3} + \frac{24}{3}$$

$$y = \frac{-10x}{3} + 8$$

$\Delta y = -10$ $\Delta x = 3$

$$y = \frac{-10x}{3} + 8$$

$\Delta x = 3$

x= -3	x= 0
$y = \frac{-10x}{3} + 8$	$y = \frac{-10x}{3} + 8$
$y = \frac{-10(-3)}{3}$	$y = \frac{-10(0)}{3} + 8$
$y = 10 + 8$	$y = 0 + 8$
$y = 18$	$y = 8$

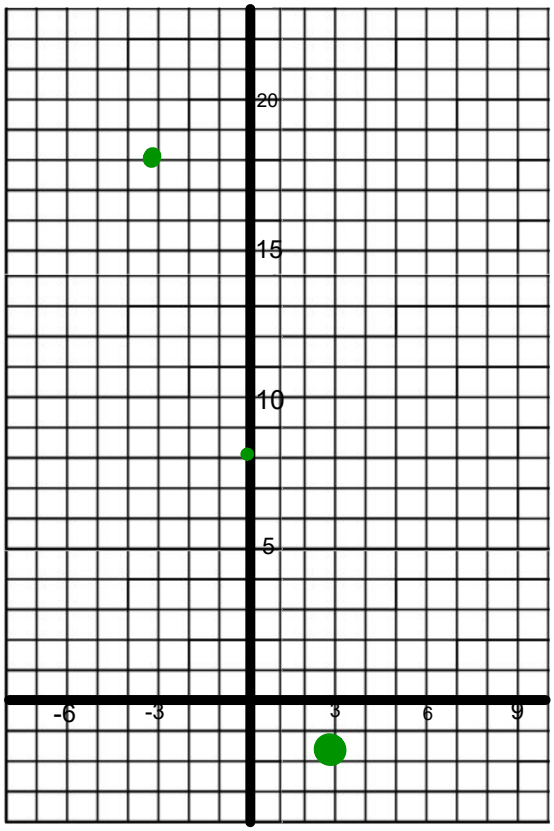
$\Delta y = -10$

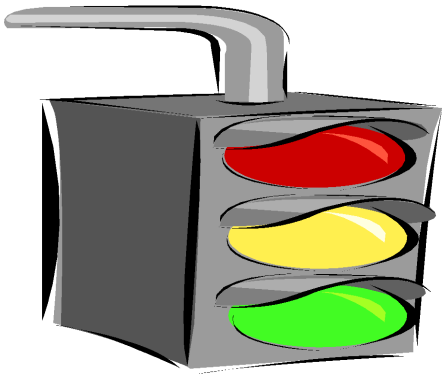
$\Delta x = 3$

x	y
-3	18
0	8
3	-2
6	-12
9	-22

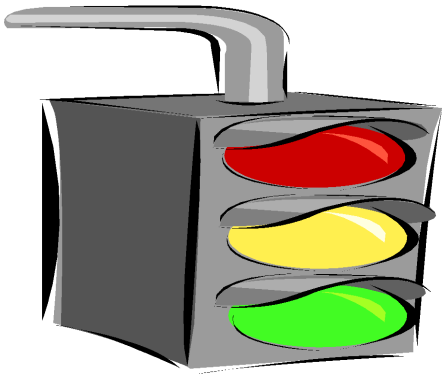
+3 +3 +3 +3

-10 -10 -10 -10





Now it is time for Home Learning



Class/Homework

PAGE 180

QUESTIONS

21

AND

Worksheet

Attachments

Assignment 4.3.pdf