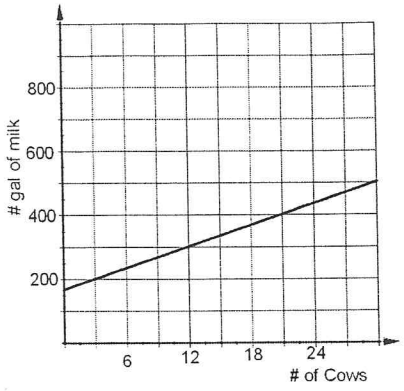
Algebra 1 Bellwork Monday, November 3, 2014

1. Find the rate of change. Give your answer as a decimal rounded to the nearest tenth and include units on your answer.

a.

Gallons	Miles
3	126
5	210
8	336
12	504

b.



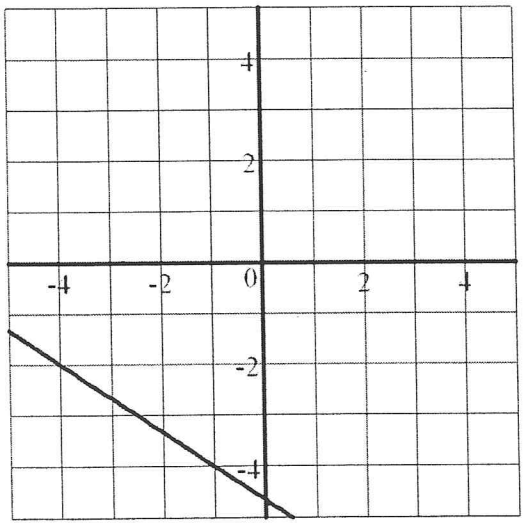
2. Find the slope of the line that passes through each pair of points.

a) $(-8,13)$ & $(-8,-12)$

b) $(\frac{1}{6},12)$ & $(\frac{8}{6},3)$

3. Write the equation of the line in Point-Slope Form that passes through the given two points:
$(4,-3)\&(-2,9)$

4. Write the equation of the line in the graph in Point-Slope Form:



Algebra 1 Bellwork Monday, November 3, 2014 ANSWERS

1. Find the rate of change. Give your answer as a decimal rounded to the nearest tenth and include units on your answer.

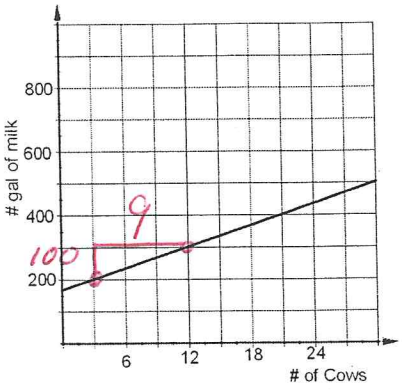
a.

$\frac{84 mi}{2 gal} = 42$ miles/gal

Gallons	Miles
3	126
5	210
8	336
12	504

2 gal → 84 mi

b.



$\frac{100 gal}{9 cows} = 11.1$ gal/cow

2. Find the slope of the line that passes through each pair of points.

a) $(-8, 13)$ & $(-8, -12)$

$\frac{13 - -12}{-8 - -8} = \frac{25}{0}$

m is undefined

b) $(\frac{1}{6}, 12)$ & $(\frac{8}{6}, 3)$

$\frac{12-3}{\frac{1}{6} - \frac{8}{6}} = \frac{9}{-7/6} = 9 \cdot \frac{-6}{7}$

$m = -54/7$

3. Write the equation of the line in Point-Slope Form that passes through the given two points:

$(4, -3)$ & $(-2, 9)$

$m = \frac{9 - -3}{-2 - 4} = \frac{12}{-6} = -2$

using $(4, -3)$

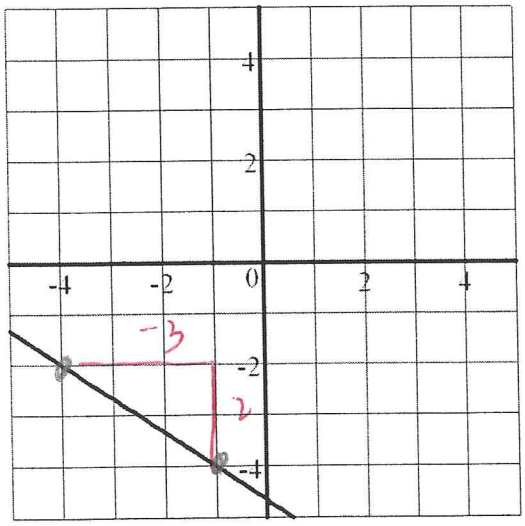
$y + 3 = -2(x - 4)$

OR

using $(-2, 9)$

$y - 9 = -2(x + 2)$

4. Write the equation of the line in the graph in Point-Slope Form:



$m = -2/3$

using $(-4, -2)$

$y + 2 = -2/3(x + 4)$

OR

using $(-1, -4)$

$y + 4 = -2/3(x + 1)$