ALGEBRA II Chapter 2 section 4 Write Equations of Lines pg. 98

FOCUS:

How do you write an equation of a line?

VOCAB:

Point - slope form:

WARM – UP:

In a computer generated drawing, a line is represented by the equation 2x - 5y = 15.

- 1. Solve the equation for y and identify the slope of the line.
- 2. What should the slope of a second line in the drawing be if that line must be perpendicular to the first line?

NOTES:

Write an equation of the line that passes through the given point and uses the given slope.

(0, 2)
$$m = -\frac{1}{3}$$
 (8, -1) $m = -\frac{1}{2}$

Write an equation of the line that passes through (-2, 1) and is (a) parallel to, and (b) perpendicular to, the line y = -3x + 1.

Write an equation of the line that passes through the given points.

(-8, 20) & (-6, 15)

(-2, 5) & (4, -7)

In a chemistry experiment you record the temperature of a compound to be -5°F one minute after you begin the experiment. Six minutes after you begin the experiment, the temperature is 20°F. Write a linear equation that models the temperature of the compound in relation to elapsed time.

You have \$6 to spend on drinks and a salad at the school cafeteria. The drinks cost \$1.25 each and the salad costs \$0.20 per ounce. Write an equation that models this situation.

Let's see if you comprehended what we worked on in class...

for homework