## ALGEBRA II

## Chapter 2 section 4

Write Equations of Lines
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## 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 $2 x-5 y=15$.

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

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

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 $-5^{\circ} \mathrm{F}$ one minute after you begin the experiment. Six minutes after you begin the experiment, the temperature is $20^{\circ} \mathrm{F}$. 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...
Try

