## Lines: Lesson 5

## Standard Form: Notes

Name:
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MATH \* ALL

**Slope-Intercept Form:** y = mx + b

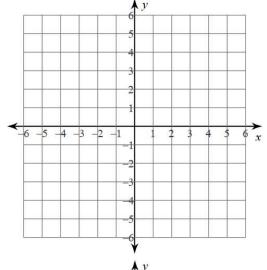
Point-Slope Form: 
$$y-y_1=m(x-x_1)$$

## 2 methods to graph 4x-5y=20

Option 1:

Turn into 
$$y = mx + b$$

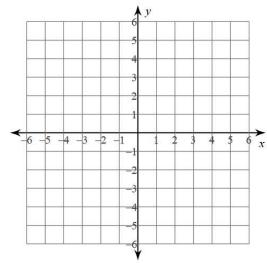
$$4x-5y=20$$



Option 2:

Find x and y intercepts.

$$4x-5y=20$$



Turn equations into standard form:

- 1. Move the \_\_\_\_ and \_\_\_ terms to one side, the constant on the other.
- 2. If there are any fractions, \_\_\_\_\_\_ the entire equation by the least common \_\_\_\_\_ .

Turn this equation into standard form:

$$\frac{-3}{4}y = \frac{1}{2}x - 7$$

## Summary of the three forms:

Slope-Intercept	Point-Slope	Standard
y=mx+b	$y-y_1=m(x-x_1)$	Ax+By=C
$y = \frac{-5}{6}x + 2$	$y-6=\frac{-5}{6}(x+3)$	5 <i>x</i> +6 <i>y</i> =12
Tells us:	Tells us:	Tells us: