Review: Graph each of the following lines using the Slope $-y$-Intercept Method

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


## The Point of Intersection (P.O.I.)

- The spot where
- We describe it using $\qquad$


## Example 1:

Find the point of intersection of each linear system by graphing using the method indicated.
a) $y=2 x+3$
$y=4 x-1$
(Slope $-y$-Intercept Method)

b) $5 x-y=-10$
$2 x-y=-1$
(Intercept Method)

## Example 2:



Nadine is trying to decide which cell phone company to sign up with to use her new iPhone. For the plan she wants, Telus has a start-up fee of $\$ 100$ and a monthly bill of $\$ 30$, while Koodoo has no start-up fee and a monthly bill of $\$ 40$.
a) Write an equation to represent the cost of her plan with Telus.
b) Write an equation to represent the cost of her plan with Koodoo.
c) Graph the equations from a) and b) and find the point of intersection (POI).
d) Which company should Nadine go with?


Homework: Pg. 201-204
\#1,3,4 (b \& c only), 5, 9

