S-2

Summary of Chapter Two.

Find the slope and y-intercept of each line.

1. $y = 2x + 3$

slope is 2
y-intercept is (0,3)

2. $y = 6x + 0$

slope is 6
y-intercept is (0,0)

Find the x-intercept of each line.

3. $y = 2x - 4$

$0 = 2x - 4$
$4 = 2x$
$2 = x$ x-intercept is (2,0)

4. $y = 2$ no x-intercept!
(y=2 is parallel to the x-axis – see problem 1 on page 20!)

Rewrite each $Ax + By = C$ equation in the form $y = mx + b$.

5. $x + y = 2$

$y = -x + 2$

6. $-3x + 2y = 7$

$2y = 3x + 7$
$y = \frac{3}{2}x + \frac{7}{2}$

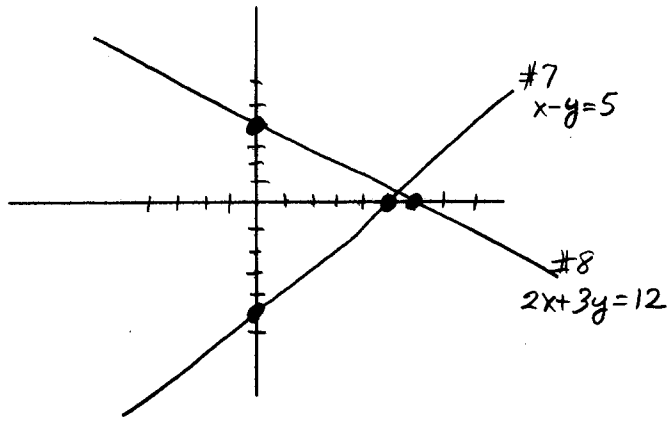
Find the x- and y-intercepts of each line. Make a sketch of each.

7. $x - y = 5$

(5,0) and (0,-5)

8. $2x + 3y = 12$

(6,0) and (0,4)



Translate each statement into an algebraic expression. Be sure to state what quantity each letter represents.

9. Sue has two more sweaters than three times the number that Phil has.

let y be the # of sweaters that Sue has
x " Phil has.

$y = 3x + 2$

10. Twice the number of mathematics courses Mary has taken together with five times the number of French courses John has taken is nine.

let x be the # of math courses taken by Mary
y " French " John

$2x + 5y = 9$