

## STANDARD FORM OF AN EQUATION OF A LINE

### STANDARD FORM

Standard form of a linear equation is written in the form of

$$Ax + By + C = 0$$

Graphing from standard form is trickier than graphing from slope, y-intercept form

SO...You can change a standard form equation into slope y-intercept form by rearranging the equation to look like \_\_\_\_\_.

**Example:** Change  $3x + 2y - 6 = 0$  to slope y-intercept form. What is the slope & y-int?

Rearrange the following equations from standard form to slope, y-intercept form.

a)  $x + y - 3 = 0$

b)  $x - y = 0$

c)  $-2x + 5y - 15 = 0$

m=

b=

m=

b=

m=

b=

**CHANGE FROM STANDARD FORM TO SLOPE Y-INTERCEPT FORM, THEN GRAPH**

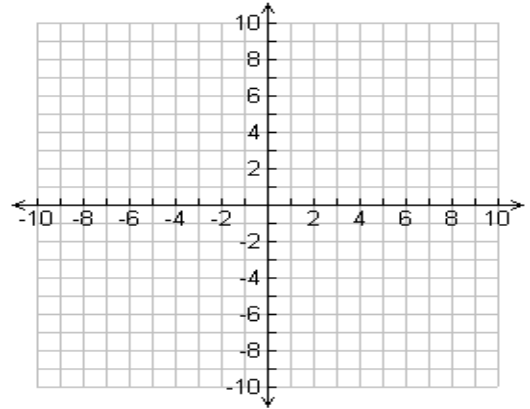
For each of the following questions:

- Rewrite the standard form equation in Slope y-intercept form ( $y = mx + b$ ) and
- State the slope and y-intercept
- Graph and label the line

1.  $2x + y + 4 = 0$

Equation: \_\_\_\_\_

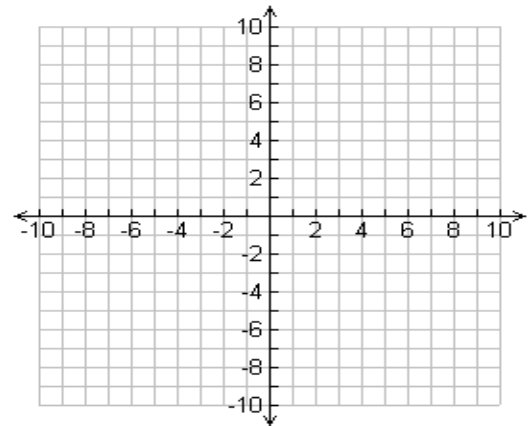
$m =$  \_\_\_\_\_  $b =$  \_\_\_\_\_



2.  $-3x - y - 6 = 0$

Equation: \_\_\_\_\_

$m =$  \_\_\_\_\_  $b =$  \_\_\_\_\_



3.  $3x + 2y - 4 = 0$

Equation: \_\_\_\_\_

$m =$  \_\_\_\_\_  $b =$  \_\_\_\_\_

