Rearranging the Equation of a Line

March 4

The Equation of a Line:

$$y = mx + b$$

Solve for *
y

Sometimes the equation is written in a * *different form. We need to rearrange it to get it into the form, **y = mx + b**.

Ex. 1. Write in the form, **y = mx + b** and then state the slope and the y-intercept.

$y = mx + b$

   a. 2x + y - 6 = 0 $// + 6$

$$2x + y = 6 \quad // -2x$$

$$y = 6 - 2x$$

$$y = -2x + 6$$

b. $7x - y - 9 = 0 \; / \, l + 9$

$$7x - y = 9$$

$$-y = 9 - 7x$$

$$\frac{-y}{-1} = \frac{-7x}{-1} + \frac{9}{-1}$$

$$y = 7x - 9$$

c. $3x + 2y = 8 \; /\!/ - 3x$

$$2y = 8 - 3x$$

$$\frac{2y}{2} = \frac{-3x}{2} + \frac{8}{2} \; \rightarrow \; y = -\frac{3}{2}x + 4$$

d. $-4x - 2y - 10 = 0 \; /\!/ + 10$

$$-4x - 2y = 10 \; /\!/ + 4x$$

$$-2y = 10 + 4x$$

$$\frac{-2y}{-2} = \frac{4x}{-2} + \frac{10}{-2}$$

$$y = -2x - 5$$

Homework:

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Once you are finished your work, come and show me and I will give you the assignment

Due Monday