

**Bathroom breaks are to be
taken before class!!**

Do NOT move the desk!!

Turn your phone OFF!!

Put your phone up!!

Sit down!! Be quiet!!

Prepare to work!!

Keep your hands to yourself!!

Softbook Pg 29

Graphing Linear Equations in Standard Form

$$Ax + By = C \quad \text{or} \quad Ax + By + C = 0$$

Solve for y

$$Ax + By = C$$

$$\begin{array}{r} -Ax \qquad -Ax \\ \hline \end{array}$$

$$\frac{By}{B} = \frac{-Ax + C}{B}$$

$$y = \frac{-A}{B}x + \frac{C}{B}$$

$$y = mx + b$$

$$m = \frac{-A}{B} \qquad b = \frac{C}{B}$$

$$Ax + By = C$$

$$\star \quad 2x + 4y = 5$$

$$A=3 \quad B=4 \quad C=5$$

$$m = \frac{-3}{4} \qquad b = \frac{5}{4}$$

$$\begin{array}{r} 2x + 4y = 5 \\ -3x \qquad -3x \\ \hline 4y = \frac{-3x + 5}{4} \\ y = \frac{-3}{4}x + \frac{5}{4} \end{array}$$

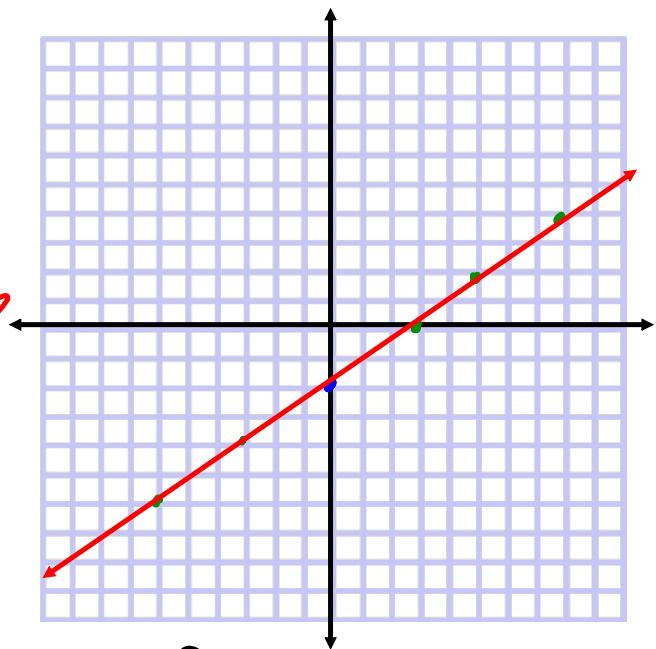
$$3) 2x - 3y = 6$$

$$A=2 \quad B=-3 \quad C=6$$

$$M = \frac{-2}{-3} = \frac{2}{3}$$

$$b = \frac{6}{-3} = -2$$

$$y = \frac{2}{3}x - 2$$



$$4) \frac{8}{3}x - \frac{4}{3}y = 4$$

$$A = \frac{8}{3} \quad B = -\frac{4}{3} \quad C = 4$$

$$M = \frac{-\frac{8}{3}}{-\frac{4}{3}} = \frac{-8}{-4} = \frac{2}{1}$$

$$b = \frac{4}{-\frac{4}{3}} = 4 \div \left(-\frac{4}{3}\right) = 4 \times \left(-\frac{3}{4}\right) = -3$$

