

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!!**

Chap 3 Sec 7

Pg 33 - Writing Equations in  
Point-Slope form

$$\underline{y} - \underline{y_1} = m(\underline{x} - \underline{x_1})$$

Never sub for  $y \neq x$

$(x_1, y_1) \Rightarrow$  given point on the line

$$y - y_1 = \underline{m}(x - x_1)$$

$$1) \begin{matrix} (4, -2) \\ x_1 \quad y_1 \end{matrix}; \quad \underline{m = \frac{1}{4}}$$

$$y - (-2) = \frac{1}{4}(x - 4)$$

$$y + 2 = \frac{1}{4}x - 1$$

$$\begin{array}{r} -2 \qquad -2 \\ \hline \end{array}$$

$$y = \frac{1}{4}x - 3$$

$$y = mx + b$$

$$m = \frac{1}{4} \quad b = -3$$

$$2) \begin{matrix} (-3, 5) \\ x_1 \quad y_1 \end{matrix} \quad m = -\frac{4}{3}$$

$$y - 5 = -\frac{4}{3}(x - (-3))$$

$$y - 5 = -\frac{4}{3}(x + 3)$$

$$y - 5 = -\frac{4}{3}x - 4$$

$$\begin{array}{r} +5 \qquad +5 \\ \hline \end{array}$$

$$y = -\frac{4}{3}x + 1$$

$$3) (2, 2) \quad m = -1$$

$$y - 2 = -1(x - 2)$$

$$y - 2 = -x + 2$$

$$+2$$
$$+2$$

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$$y = -x + 4$$

$$m = -1 \quad b = 4$$

$$4) (-1, -5) \quad m = 4$$

$$y - (-5) = 4(x - (-1))$$

$$y + 5 = 4(x + 1)$$

$$y + 5 = 4x + 4$$

$$-5$$
$$-5$$

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$$y = 4x - 1$$

$$m = 4 \quad b = -1$$











