

Name: NOTES
Geometry L 2.5

Date: _____
Mrs. DeNeef

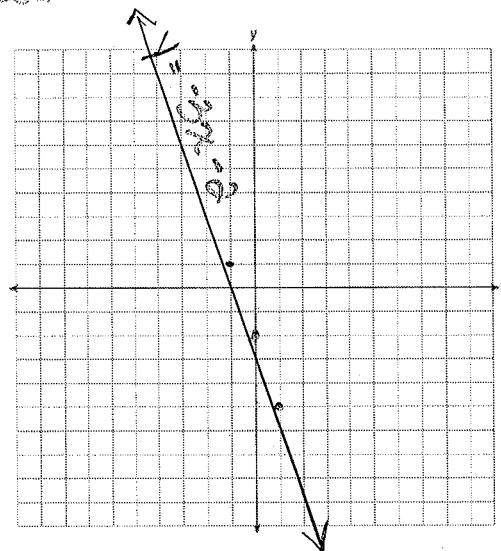
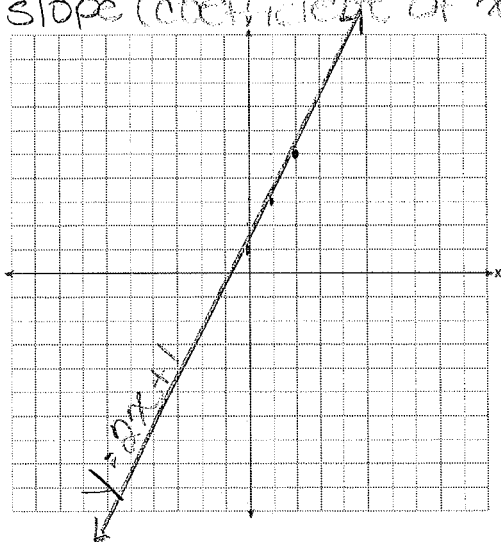
Graphing Equations with slope and y-intercept

Graph each equation using slope and the y-intercept.

1. $y = 2x + 1$

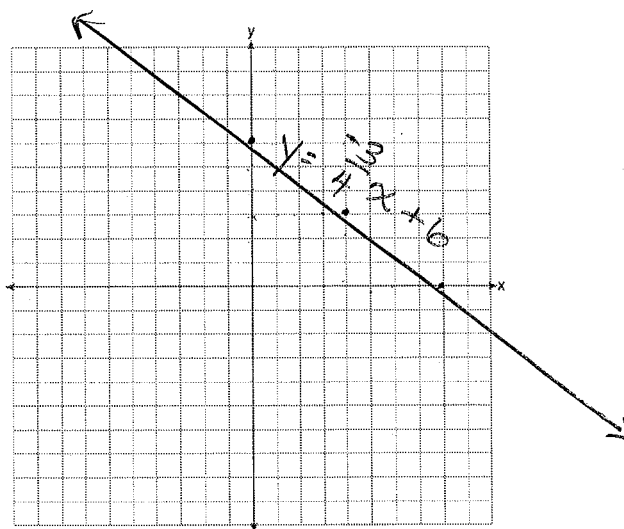
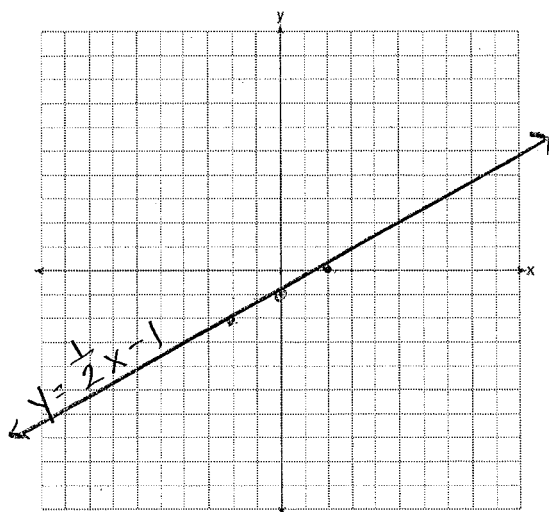
2. $y = -3x - 2$

- ① make sure equation is in $y = mx + b$ form
- ② plot the y-intercept (the constant.)
- ③ find the slope (coefficient of x)
- ④ use the slope to plot 2 more pts
- ⑤ draw the line
- ⑥ label

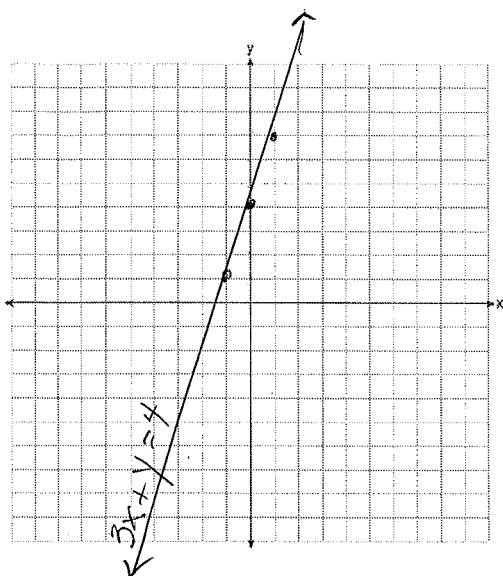


3. $y = \frac{1}{2}x - 1$

4. $y = -\frac{3}{4}x + 6$



5. $3x + y = 4$
 $y = -3x + 4$

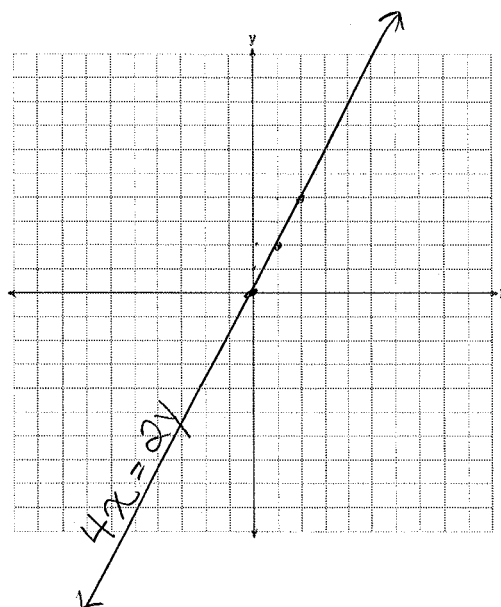


6. $4x = 2y$

$$\frac{4x}{2} = \frac{2y}{2}$$

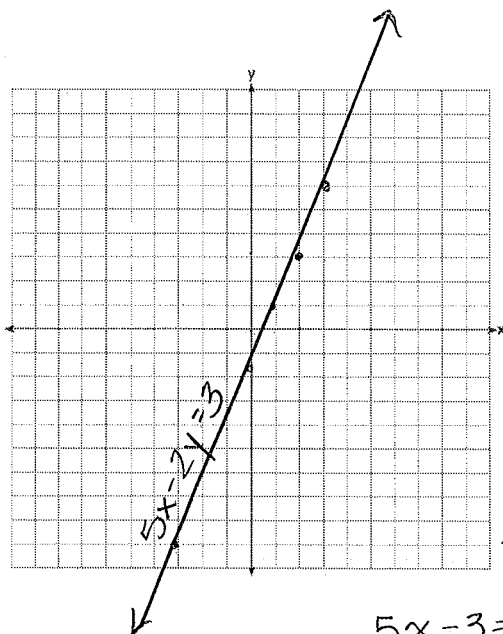
$$2x = y$$

no constant
 $\rightarrow$ goes through the origin

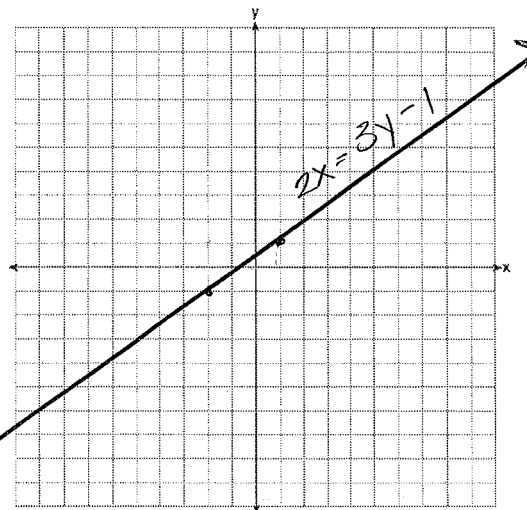


Graph the equation using slope and any point.

7. $5x - 2y = 3$



8. $2x = 3y - 1$



HW: p.373-374 (4-20 even)

$$\frac{5x}{2} - \frac{3}{2} = \frac{2y}{2}$$

$$\frac{5}{2}x - 1.5 = y$$

$$\begin{aligned} \hookrightarrow 2.5(1) - 1.5 &= 1 \\ 2.5(3) - 1.5 &= 6 \\ 2.5(-3) - 1.5 &= -9 \end{aligned}$$

$$\frac{2x}{3} + \frac{1}{3} = \frac{3y}{3}$$

$$\frac{2}{3}x + \frac{1}{3} = y$$

$$\frac{2}{3}(-2) + \frac{1}{3} = -\frac{4}{3} + \frac{1}{3} = -\frac{3}{3} = -1 \quad (-2, 1)$$

$$\frac{2}{3}(1) + \frac{1}{3} = \frac{2}{3} + \frac{1}{3} = 1 \quad (1, 1)$$