Algebra RH **HW#_____**

Identify the slope and y-intercept of the graph of each equation below. ***Remember: The equation has to be in slope-intercept form (y = mx + b) in order to identify the slope and y-intercept.***

1. $y = 7x + 1$ 2. $y = 5x - 1$ 3. $y = -x - 3$ 4. $5x - 10y = -20$

5. $x + 10y = -20$ 6. $2y = 8$ 7. $x - 1 = 0$

Graph each equation using the slope-intercept method. ***If necessary, write the equation in slope-intercept form first.***

8. $y = \frac{2}{3}x$ 9. $y = 2x - 3$ 10. $y = -\frac{1}{2}x + 1$ 11. $-3x + y = 4$

12. $4y = 3x - 8$

13. On the same set of axes, graph the following 2 equations using the slope-intercept method.

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

Look at the equations and the graphs and draw a conclusion (*hint: what do you notice about the graph of the two lines and what is the same about the equations of the two lines?*)

14. On the same set of axes, graph the following 2 equations using the slope-intercept method.

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

Look at the equations and the graphs and draw a conclusion (*hint: what do you notice about the graph of the two lines? Do you notice anything about the equations?*)