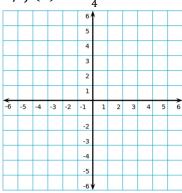
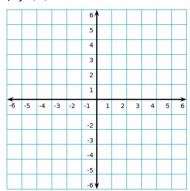
Homework Week of Jan. 6

Graph the linear function.

1.)
$$f(x) = -\frac{1}{4}x + 3$$



2.)
$$f(x) = 6x - 5$$



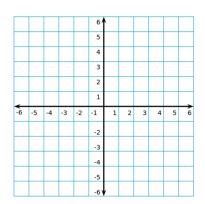
Solve each inequality.

3.)
$$3(w+9) \le -27$$

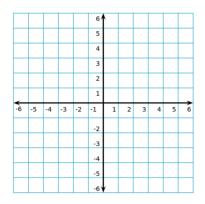
4.)
$$-4(d+1) < -12$$

Graph the absolute value functions.

5.)
$$f(x) = -2|x+3|-4$$



6.)
$$f(x) = \frac{2}{3}|x-1|-3$$



Solve.

7.) If you are solving a system of equations and both equations are exactly the same, how many solutions will you have?

$$-4x + 5y = 25$$

 $-4x + 5y = 25$

8.) If you are solving a system and both variables are exactly the same but the constants are different, how many solutions will you get?

$$2x - 8y = -24$$
$$2x - 8y = 6$$

- 9.) Write a system of linear equations that will have no solution.
- 10.) Write a system of linear equations that will have infinitely many solutions.

Solve.

11.)
$$5x + y = 9$$

 $10x - 7y = -18$

12.)
$$8x + 14y = 4$$

 $-6x - 7y = -10$