Math 7 Period _____   Name_____
7.6.15 Homework Set   Date_____

1. Consider the inequality $-1 \leq \frac{x}{2}$.

    A. Predict which values of x will make the inequality true.

    B. Complete the table to check your prediction.

x	-4	-3	-2	-1	0	1	2	3	4
$\frac{x}{2}$									

2. Consider the inequality $1 \leq \frac{-x}{2}$.

    A. Predict which values of x will make it true.

    B. Complete the table to check your prediction.

x	-4	-3	-2	-1	0	1	2	3	4
$-\frac{x}{2}$									

3. Diego is solving the inequality $100 - 3x \geq -50$. He solves the equation $100 - 3x = -50$ and gets $x = 50$. What is the solution to the inequality?

    a. $x < 50$ c. $x > 50$

    b. $x \leq 50$ d. $x \geq 50$

4. Solve the inequality $-5(x - 1) > -40$, and graph the solution on a number line.

5. Select **all** values of x that make the inequality $-x + 6 \geq 10$ true. (from Unit 6, Lesson 13)
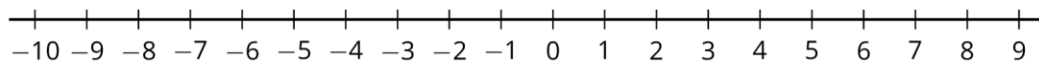
   a. -3.9

   b. 4

   c. -4.01

   d. -4

   e. 4.01

   f. 3.9

   g. 0

   h. -7

6. Draw the solution set for each of the following inequalities. (from Unit 6, Lesson 13)

   A. $x > 7$

   ```
   +---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
   -10 -9 -8 -7 -6 -5 -4 -3 -2 -1  0  1  2  3  4  5  6  7  8  9
   ```

   B. $x \geq -4.2$

   ```
   +---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
   -10 -9 -8 -7 -6 -5 -4 -3 -2 -1  0  1  2  3  4  5  6  7  8  9
   ```