## Unit 6, Lesson 15 <br> Practice Problems

1. a. Consider the inequality $-1 \leq \frac{x}{2}$.
i. Predict which values of $x$ will make the inequality true.
ii. Complete the table to check your prediction.

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

b. Consider the inequality $1 \leq \frac{-x}{2}$.
i. Predict which values of $x$ will make it true.
ii. Complete the table to check your prediction.

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

2. Diego is solving the inequality $100-3 x \geq-50$. He solves the equation $100-3 x=-50$ and gets $x=50$. What is the solution to the inequality?
A. $x<50$
B. $x \leq 50$
C. $x>50$
D. $x \geq 50$
3. Solve the inequality $-5(x-1)>-40$, and graph the solution on a number line.
4. Select all values of $x$ that make the inequality $-x+6 \geq 10$ true.
A. -3.9
B. 4
C. -4.01
D. -4
E. 4.01
F. 3.9
G. 0
H. -7
5. Draw the solution set for each of the following inequalities.
a. $x>7$

b. $x \geq-4.2$

6. The price of a pair of earrings is $\$ 22$ but Priya buys them on sale for $\$ 13.20$.
a. By how much was the price discounted?
b. What was the percentage of the discount?
