7.13

1. Solve the following two-step inequality.

$$\frac{x-9}{2} < -10$$

2. Look at the number line below. The number line represents the graph of which inequality?



- A. 3 > 2t 1B. 5 < 3t + 11C. 6 < 2t + 2D. 8 > 2t - 4
- 3. Select the statement that correctly represents the inequality below.

"Twice a number increased by 14 is at least the opposite of 10"

- A. $2n+14 \le -10$ B. $2n+14 \ge -10$ C. $2n + 14 \le 10$
- D. $2n+14 \ge 10$
- 4. A truck can carry a maximum of 1,350 pounds of weight. How many 250-pound scoops (d) of dirt can the truck carry?
 - A. d > 5
 - B. $d \ge 5$
 - C. *d* < 5
 - D. $d \leq 5$

5. James solved the inequality $-3x \le -9$ and got $x \le 3$. What did he do wrong?

6. Identify all numerical values that are part of the solution set for the following inequality.

$$3x - 4 \le -16$$

-4	4.5	-5.5
4	-3.5	-4.5

- 7. What values for *w* make the following inequality true? -4w < 12
 - A. $\{-3, -4, -5, -6, -7, ...\}$ B. $\{-4, -5, -6, -7, -8...\}$ C. $\{-3, -2, -1, 0, 1, ...\}$ D. $\{-2, -1, 0, 1, 2...\}$
- 8. What is the solution to 2y > -8?
 - A. y > -2B. y > -4C. y > -6
 - D. y > -10