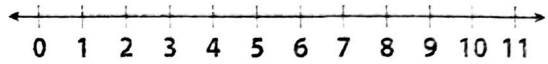**LESSON 7-1**

Writing and Solving One-Step Inequalities
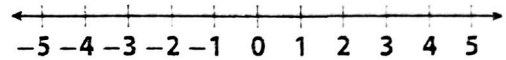
Practice and Problem Solving: A/B

Solve each inequality. Graph and check the solution.
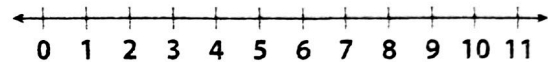
1. $\dfrac{e}{2} < 3$ _____

   ```
   0  1  2  3  4  5  6  7  8  9  10 11
   ```
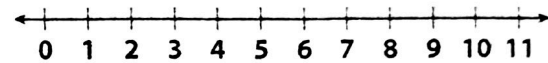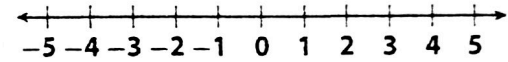
2. $n - 1 > 3$ _____

   ```
   -5 -4 -3 -2 -1  0  1  2  3  4  5
   ```

3. $5 < 3 + w$ _____

   ```
   0  1  2  3  4  5  6  7  8  9  10 11
   ```

4. $8 \le 2m$ _____

   ```
   0  1  2  3  4  5  6  7  8  9  10 11
   ```

5. $r - 4 < 1$ _____

   ```
   -5 -4 -3 -2 -1  0  1  2  3  4  5
   ```

6. $2 \le -1t$ _____

   ```
   -5 -4 -3 -2 -1  0  1  2  3  4  5
   ```

7. $2 \ge s - 2$ _____

   ```
   0  1  2  3  4  5  6  7  8  9  10 11
   ```

8. $2 \ge 5 + p$ _____

   ```
   -5 -4 -3 -2 -1  0  1  2  3  4  5
   ```
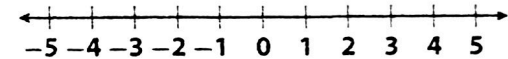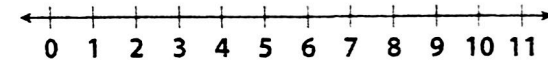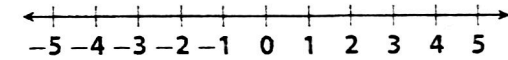
Solve each inequality.

9. $\dfrac{1}{5} \le \dfrac{x}{15}$ _____

10. $9 > -r$ _____

11. $-2 + b < 3$ _____

12. $70 - a \ge 25$ _____

Write an inequality for each problem. Then solve.

13. Arthur earned $136 in three weeks. He goes back to school in one more week. He needs at least $189 to buy the new coat that he wants for school. How much must Arthur earn in the next week?

_____

14. Marna is playing a game where you score –5 points each time you guess the correct answer. The goal is to get the lowest score. To win the game, Marna must have a score less than –80 points. How many correct answers does Marna need to win the game?
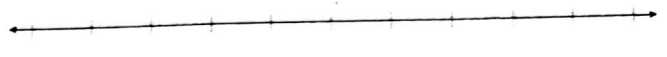
_____

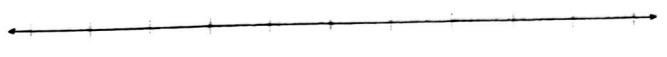## LESSON **7-1** Writing and Solving One-Step Inequalities

Practice and Problem Solving: C

Solve each inequality. Graph and check the solution.
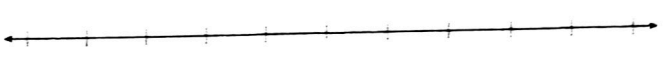
1. $-3.2a \le 8$ _____

2. $2 > n + 0.8$ _____

3. $b - 4.2 \ge -5$ _____
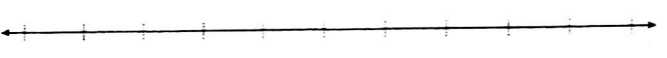
4. $\dfrac{e}{2} < -0.5$ _____

5. $5.1 - r \ge 5$ _____

6. $-1.44 \le -1.8y$ _____

Write an inequality for each problem. Solve the inequality. Then solve the problem.

7. Ashley took $20 out of her savings account each week on Friday. How many weeks ago did she have at least $250 in her account?

   _____

8. A cube has a volume of greater than 125 cm³. What are the possible lengths of the side of that cube?

   _____

9. A treasure chest sinks at a rate no less than 20 feet per second. The floor of the ocean is at most at −4,200 feet. Will the treasure chest reach the ocean floor in less than 3 minutes? Explain.

   _____