

Name \_\_\_\_\_ Date \_\_\_\_\_

**Patterns and Relations**  
**Unit 4 Line Master 4a**

**Are You the Solution?**

Solve each inequality, then graph the solution on a number line.  
Use a value of the variable to verify your solution.

1.  $x - 6 \leq 2$

2.  $-2x > 32$

3.  $-\frac{p}{8} < 2$

4.  $q - 3.2 \geq 2.5$

5.  $2y + 13.3 < y - 24.1$

6.  $9.5 - 2.5a > 16$

**Are You the Solution?**

7. A plumber had 35 m of pipe. They use some of the pipe when installing a shower. The plumber has at least 7 m of pipe remaining. How much pipe could they have used?

- Write an inequality to represent the situation.
- Solve the inequality, then graph the solution.

8. In a study, a researcher tracks the social media usage of the participants. They found that, on average, participants spend the same amount of time on social media each weekday, and another 127 min on the weekend. The participants spend fewer than 562 min on social media during the entire week. How much time could they spend on social media each weekday?

- Write an inequality to represent the situation.
- Solve the inequality, then graph the solution.