

Lesson 8-4

Reinforce Understanding

Write and Represent Inequalities

I can write inequalities to represent real-world situations.

Worked model

A club trip requires each member to save at least \$45. Write an inequality for the amounts that work.

1. Name the variable: let s = the dollars a member saves.
2. Find the key phrase: 'at least' means the amount can equal 45 or be more.
3. That phrase matches the symbol $\geq$, so write $s \geq 45$.
4. Test values: 45 works and 52 works, but 39 falls below the limit.

Answer: $s \geq 45$, so any amount of 45 dollars or more is a solution.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Place markers on the number line for each value, then decide: is $5 > 3$ true or false? Is $2 \geq 7$ true or false?

Mark and label each value on the number line.

Show your thinking

2. Which inequality represents: 'The temperature is less than 40 degrees'?

Circle the letter of the best answer. Show how you know.

- A. $t < 40$
- B. $t > 40$
- C. $t \leq 40$
- D. $t = 40$

Show your work

3. Which inequality represents: 'You must be at least 48 inches tall to ride'?

Circle the letter of the best answer. Show how you know.

- A. $h \geq 48$
- B. $h > 48$
- C. $h < 48$
- D. $h \leq 48$

Show your work
