

Lesson 8-4 • Group 1

Reinforce Understanding

8.4 Small Group • Group 1

With my small group, I can write inequalities to represent real-world situations — one step at a time, with support.

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. Identify the key phrase, symbol, and write the inequality for each situation.

Complete the table. Show how you found each value.

Situation	Key Phrase	Symbol	Inequality
A package weighs less than 50 pounds.			
You need at least \$25 to buy the game.			
No more than 30 students can join the club.			

Show your work

3. 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