Write and Represent Inequalities

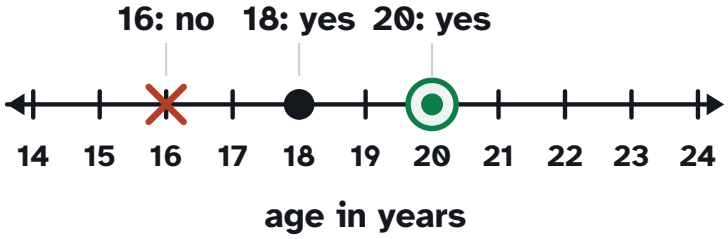
Write an inequality to show a real situation that has many possible answers.

Name _____ **Date** _____

Tonight's spark

A sign at the volunteer desk says: "Must be at least 18 years old." Can a 17-year-old sign up? Can an 18-year-old? What about a 30-year-old?

Guess first: does "at least 18" include exactly 18, yes or no?



Our class model: the word-to-symbol match

Try it

Work it out on paper. Write one answer on each line.

1. **Which symbol means 'at least'?**

   A. < **B.** ≤ **C.** ≥ **D.** >

   My answer _____

2. **Which inequality means 'x is less than 7'?**

   A. $x < 7$ **B.** $x > 7$ **C.** $x \geq 7$ **D.** $x = 7$

   My answer _____

3. **A sign says 'No more than 5 people.' Which inequality shows p?**

   A. $p < 5$ **B.** $p \leq 5$ **C.** $p \geq 5$ **D.** $p > 5$

   My answer _____

4 **'You must be at least 48 inches tall to ride.' Which inequality shows height h?**

A. h ≤ 48 **B.** h > 48 **C.** h < 48 **D.** h ≥ 48

My answer _____

5 **Which words match n > 10?**

A. n is at most 10 **B.** n is more than 10 **C.** n is fewer than 10 **D.** n is at least 10

My answer _____

6 **Which number makes x ≥ 6 true?**

A. 5 **B.** 4 **C.** 6 **D.** 3

My answer _____

Talk about it

Which words in the sign tell you the symbol? Does the limit number itself fit?

Home mission

Gather some cups. Say: "I need at least 6 cups on the table." Would 6 cups work? 5? 9? Then write c ≥ 6 together.

If we get stuck, ask

- What is the key phrase — 'at least,' 'at most,' 'more than,' or 'fewer than'?
- Is the exact number allowed? That tells us if we use the line under the symbol.
- Can you name two numbers that would fit this rule?

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/8-4/homework.html

How did it feel? (optional)

Tricky Getting there Got it