## Lesson 20: Interpreting Inequalities

* Let’s interpret the meaning of situations with phrases like “at least,” “at most,” and “up to.”

### 20.1: Math Talk: Solving Inequalities

Mentally solve for .

### 20.2: Checking and Graphing Inequalities

Solve each inequality. Then, check your answer using a value that makes your solution true.

* 1. Solve the inequality.
  2. Check your answer using a value that makes your solution true.
  3. Solve the inequality.
  4. Check your answer using a value that makes your solution true.
  5. Solve the inequality.
  6. Check your answer using a value that makes your solution true.

For each statement:

* Use a number line to show which values satisfy the inequality.
* Express the statement symbolically with an inequality.

1. The elevator can lift up to 1,200 pounds. Let  represent the weight being lifted by the elevator.

* Blank number line 

1. Over the course of the senator's term, her approval rating was always around 53% ranging 3% above or below that value. Let   represent the senator’s approval rating.

* Blank number line 

1. There's a minimum of 3 years of experience required. Let  represent the years of experience a candidate has.

* Blank number line 

### 20.3: Card Sort: What’s the Situation?

Your teacher will give you a set of cards that show a graph, an inequality, or a situation. Sort the cards into groups of your choosing. Be prepared to explain the meaning of your categories. Then, sort the cards into groups in a different way. Be prepared to explain the meaning of your new categories.



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