

Number Lines Lesson 4

Compound Inequalities

Guess My Number

Rules

The teacher thinks of a secret number between two numbers. Be sure to tell the student what two numbers it is between without telling the student what the actual number is. For example, the number might be between 0 and 50, between -10 and 10, etc. Have the student follow the steps below to use number lines to keep track of what the number might be:

1. Have the student make a number line that is shaded in the specified range such as between 0 and 50, between -10 and 10, etc.
2. Have the student guess the number.
3. Tell the student if your secret number is higher or lower than their guess.
4. Have the student make a number line that is shaded in the new range of possible numbers. For instance, if the student guessed 25 (after you said the number was between 0 and 50), and you said the secret number is higher than 25, then the student would make a new number line that is shaded between 25 and 50. The student would put an "x" over 25 since the number was not 25, but would have a full cell over 50 because you haven't said whether it is or isn't 50.
5. Repeat steps 2 to 4 until the correct number is guessed. Try to do this in as few steps as possible.

Variations

- Change the range of numbers.
- Use fractions, negative numbers, decimals, or numbers with more digits.
- Have the student change the scale (the difference between the tick mark values).