

One-Step and Two-Step Inequalities

Name: _____ Date: _____

LEARNING OBJECTIVE

The student will solve one- and two-step inequalities and understand how multiplying/dividing by a negative flips the inequality sign.

MATERIALS NEEDED

- Notebook paper
- Pencil
- Ruler
- 2 different colored pencils

HANDS-ON ACTIVITY

1. Solve the inequality $x + 4 > 9$ step by step on notebook paper, showing your inverse operation.
2. Solve the inequality $-2x < 8$ step by step, and mark clearly the point where you divide by a negative number.
3. Test your solution to $-2x < 8$ by picking a number that fits your solution and a number that does not, substituting both into the ORIGINAL inequality to prove your solution is correct.
4. Solve two more inequalities of your choice, one one-step and one two-step, using a different colored pencil for each step.
5. Write a short rule in your own words explaining when the inequality sign must flip.

QUESTIONS

1. Solve $x + 4 > 9$.

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2. Solve $-2x < 8$ and explain what happened to the inequality sign.

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3. Prove your answer to $-2x < 8$ is correct by testing one value that works and one that doesn't in the original inequality.
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4. State the rule for when you must flip the inequality sign.
