

Math 7 - Unit 2c

Day 7 - Solving MORE Two-Step Inequalities

Lesson Objectives:

- I can solve two-step inequalities.
- I know how to show work when solving inequalities.

Solve each inequality. Don't forget to show work, give properties as reasons, and graph your solution on a number line.

1. $-3y + 1 = 4$ Subtraction Prop (1)
 $-3y = 3$
 $y = -1$ Division Prop (2)
 Number line: $y = -1$

2. $-1 < 2c + 5$ Subtraction Prop (1)
 $-6 < 2c$
 $-3 < c$ Division Prop (2)
 Number line: $c > -3$

Steps for Solving Equations/Inequalities

Step #0 Simplify each side of the equation.

Step #1 Get rid of the constant

Step #2 Get rid of the coefficient

**Keep the inequality symbol the same unless multiplying or dividing both sides of the inequality by a NEGATIVE number.

Solve each inequality. Don't forget to show work, give properties as reasons, and graph your solution on a number line.

3. $3 - \frac{c}{2} > 5$
 $-3 - 3$ Subtraction Prop (1)
 $-\frac{c}{2} > 2$ Prop (2)
 $c < -4$ Multiplication Prop (3)
 Number line: $c < -4$

4. $6 - \frac{2x}{3} < 3$
 $-6 - 6$ Subtraction Prop (1)
 $-\frac{2x}{3} < -3$ Prop (2)
 $x > 4.5$ Multiplication Prop (3)
 $x > 4.5$ Subtraction Prop (4)
 Number line: $x > 4.5$

You buy some candy bars at \$0.55 each and one newspaper for \$0.35. How many candy bars can you buy with \$2.00?

Homework

MORE Two-Step Inequalities WKS

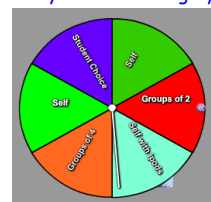
* Individual Think Time *



What to do if you get stuck...

1. Reread the problem. Did you write it down correctly?
2. Reread your notes. Is there a problem similar that we did together in class?
3. Find a problem similar in your book. Try this one to see if it helps.
4. Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...





3...2...1...

On a piece of paper write down

3 things you learned,

2 questions you still have, and

1 connection you'd like to share.