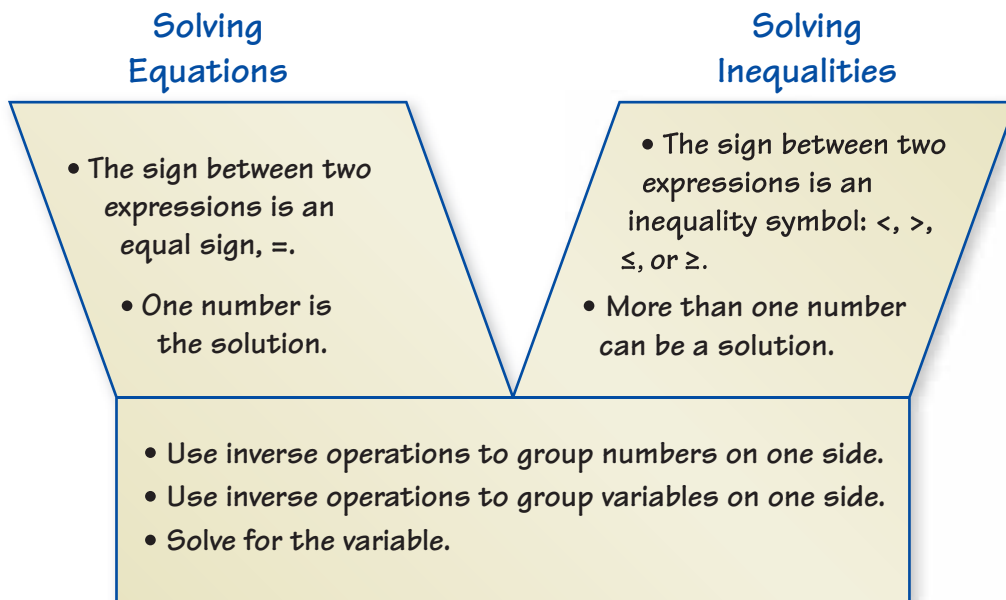Check It Out
Graphic Organizer
BigIdeasMath com

You can use a **Y chart** to compare two topics. List differences in the branches and similarities in the base of the Y. Here is an example of a Y chart that compares solving equations and solving inequalities.
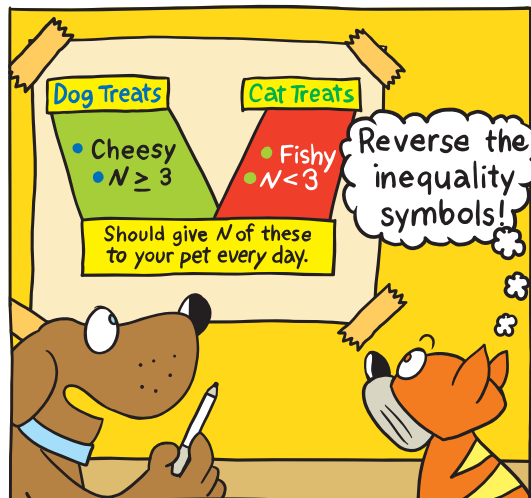
Solving
Equations

Solving
Inequalities

- The sign between two expressions is an equal sign, =.
  - One number is the solution.

- The sign between two expressions is an inequality symbol: <, >, ≤, or ≥.
  - More than one number can be a solution.

- Use inverse operations to group numbers on one side.
- Use inverse operations to group variables on one side.
- Solve for the variable.

On Your Own

Make a Y chart to help you study and compare these topics.

1. writing equations and writing inequalities

2. graphing the solution of an equation and graphing the solution of an inequality

3. graphing inequalities that use > and graphing inequalities that use <

4. graphing inequalities that use > or < and graphing inequalities that use ≥ or ≤

5. solving inequalities using addition and solving inequalities using subtraction

Dog Treats
- Cheesy
- $N ≥ 3$

Cat Treats
- Fishy
- $N < 3$

Should give N of these to your pet every day.

Reverse the inequality symbols!

"Hey Descartes, do you have any suggestions for the Y chart I am making?"

After you complete this chapter, make Y charts for the following topics.

6. solving inequalities using multiplication and solving inequalities using division

7. solving two-step equations and solving two-step inequalities

8. Pick two other topics that you studied earlier in this course and make a Y chart to compare them.