

The slide features a light beige background with a blue grid pattern in the top-left and bottom-right corners. A dark blue rectangular area is positioned on the left side, containing the text. A vertical red bar is located on the far left edge of the slide.

Algebra 1

Chapter 3
Section 2

Equivalent Inequalities

$$3x + 7 = 13$$

$$7y - 3 > 4$$

$$3x = 6$$

$$7y > 7$$

Remember: Equivalent equalities have the same solutions
Equivalent inequalities also have the same solutions

Solving Inequalities with Addition or Subtraction

$$x + 9 > 5$$

$$h + 13 \leq 13$$

$$t - 3 \geq -1$$

$$4 + z < -9$$

$$11 < 1 + y$$

$$r - 14 \geq 6$$

$$x > -4$$

$$h \geq 0$$

$$t \geq 2$$

$$z < -13$$

$$y > 10$$

$$r \geq 20$$

Writing an Inequality

Two baseball teams are tied 4-4 in extra innings. If the game can not end in a tie, write an inequality that states how many runs will be scored in this game.

$$r > 4 + 4$$

$$r > 8$$

Writing and Solving an Inequality

You have to sell at least 175 raffle tickets for your school fundraiser drawing. You have sold 96 tickets so far. Write an inequality identifying how many more tickets you will need to sell. Then solve.

$$t + 96 \geq 175$$

$$t \geq 79$$

Graphing a Solution

Solve the inequality and graph the solution:

$$10 < 9 + x$$

$$1 < x$$

$$x > 1$$

