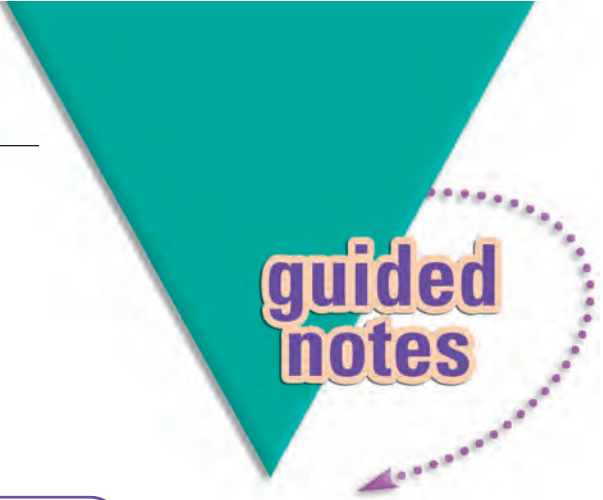


NAME \_\_\_\_\_

**Module 5** Solving Linear Inequalities of One Variable**Lesson 1** Solving Linear Inequalities by Inspection

 guided notes

### Lesson Objectives

- Solve a linear inequality by inspection.
- Write the solution to an inequality in proper notation.
- Graph the solution to an inequality on a number line.
- Check the solution to an inequality.

An **inequality** \_\_\_\_\_ is a statement formed by placing an inequality symbol between two expressions.

#### Inequality Symbols

$>$ _____	is greater than
$\geq$ _____	is greater than or equal to
$<$ _____	is less than
$\leq$ _____	is less than or equal to
$\neq$ _____	is not equal to

A **solution** \_\_\_\_\_ of an equation is a number which, when substituted for the variable, produces a true statement.

If a problem starts out as an equation, the solution is given by another **equation** \_\_\_\_\_.

Draw an **open** \_\_\_\_\_ circle around a point on the number line to indicate that this point is not a solution to the inequality.

Draw a shaded arrow to the **right** \_\_\_\_\_ of a point on the number line to indicate that every number greater than this point is a solution to the inequality.

Draw a **closed** circle around a point on the number line to indicate that this point is a solution to the inequality.

Draw a shaded arrow to the **left** of a point on the number line to indicate that every number less than this point is a solution to the inequality.

1 Solve:  $x + 4 > 0$

Solution:  $x > -4$



2 Solve:  $x + 2 \leq 0$

Solution:  $x \leq -2$

