

7.6 SOLVING INEQUALITIES WITH ADD OR SUBT.

Guided Notes

1

Key Ideas

Addition Property of Inequality

Words When you the number to side of an the inequality remains

Numbers

Algebra

Study Tip

You can solve inequalities the same way you solve equations. Use inverse operations to get the variable by itself.


Graph

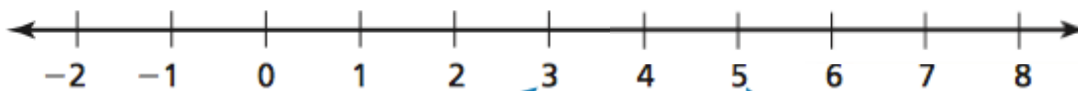


EXAMPLE 1 Solving an Inequality Using Addition

Solve $x - 3 > 1$. Graph the solution.

Write the _____
Property of _____

 The solution is



$x = 3$

$x = 5$

Key Ideas

2

Subtraction Property of Inequality

Words When you subtract the same number from both sides of an inequality, the inequality remains true.

Numbers

Algebra

Graph



These properties are also true for \leq and \geq .

EXAMPLE 2 Solving an Inequality Using Subtraction

Solve $15 \geq 6 + x$. Graph the solution.



Write the solution set.

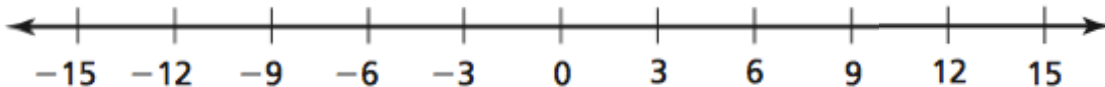
Property of

Reading



The inequality $15 \geq 6 + x$ is the same as $9 \geq x$.

••• The solution is



EXAMPLE 3 Real-Life Application

3

A flea market advertises that it has more than 250 vending booths. Of these, 184 are currently filled. Write and solve an inequality to represent the number of vending booths still available.

Words

Variable

Inequality

Write the _____

_____ Property of _____



vending booths are still available.