

2.14

Solving a Linear Inequality: Problem Type 1

• Example 1

Solve the inequality $x - 8 < 7$.

To solve $x - 8 < 7$, add 8 to both sides of the inequality by the addition property.

$$x - 8 < 7$$

$$x - 8 + 8 < 7 + 8$$

$$x < 15 \quad (\text{The solution})$$

● ● ● CHECK YOURSELF 1

Solve.

$$x - 9 > -3$$

● ● ● CHECK YOURSELF ANSWER

1. $x > 6$.

2.14 Exercises

Name _____

Section _____

Date _____

A N S W E R S

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

Solve the following inequalities.

1. $x - 7 < 6$

2. $x + 5 \leq 4$

3. $x + 8 \geq 10$

4. $x - 11 > -14$

5. $x - 4 \leq 7$

6. $x + 3 > -2$

7. $x + 6 \leq 11$

8. $x - 1 > 9$

9. $x - 5 \geq 8$

10. $x + 12 > 25$

11. $x + 9 < 17$

12. $x - 7 \leq 24$