

Skill: Solving Equations**Investigation 1****Thinking With Mathematical Models**

Solve each equation.

1. $4r + 6 = 14$

2. $9y - 11 = 7$

3. $\frac{m}{4} + 6 = 3$

4. $-5b - 6 = -11$

5. $\frac{v}{-7} + 8 = 19$

6. $15w - 21 = -111$

7. $7 - 2n = n - 14$

8. $3d + 8 = 2d - 7$

9. $7x - 8 = 3x + 12$

10. $6k - 25 = 7 - 2k$

Skill: Solving Equations *(continued)***Investigation 1****Thinking With Mathematical Models**

For Exercises 11–14, solve each equation. Check your answer.

11. $3h - 5h + 11 = 17$

12. $7g + 14 - 5g = -8$

13. $4 = 0.4(3d - 5)$

14. $\frac{2}{3}g + \frac{1}{2}g = 14$

- 15.** The perimeter of a pool table is 30 feet. The table is twice as long as it is wide. What is the length ℓ of the pool table? Write an equation to model the situation. Then solve the equation for ℓ .