

Variables and Equations

Solve each equation. Check the solution.

$$5r = 30$$

Way 1: Use a related multiplication fact.

$$5r = 30$$

Think: $5 \times 6 = 30$.

So, r must be 6.

Way 2: Use a related division fact.

$$5r = 30$$

$$5 \times r = 30$$

$$r = 30 \div 5$$

$$r = 6$$

Check.

$$5r = 30$$

$$5 \times 6 = 30$$

$$30 = 30 \checkmark$$

1. $r + 10 = 15$ 2. $z - 12 = 6$ 3. $27 \div t = 9$ 4. $15 = r - 9$

5. $e \times 7 = 49$ 6. $6p = 18$ 7. $9 = q \div 7$ 8. $s - 9 = 7$

Match each equation to the words that describe it. Then solve.

9. $5g = 40$ _____

a. Twelve is a number minus 3.

10. $g + 20 = 30$ _____

b. A number divided by 6 is 7.

11. $12 = g - 3$ _____

c. Five times a number is 40.

12. $g \div 6 = 7$ _____

d. A number plus 20 is 30.

Problem Solving

Show your work.

13. David is writing a 20-chapter book. He has already written 12 chapters. Write an equation to find the number of chapters he has left to write. Then solve the equation.
