# SKILL 23: Dividing Multiples of Ten

You can use basic facts and division patterns to help you divide.

## Example 1

**Study the division sentences. What pattern do you see?**

$$45 \div 9 = 5$$
$$450 \div 9 = 50$$
$$4{,}500 \div 9 = 500$$
$$45{,}000 \div 9 = 5{,}000$$

If the divisor remains the same and the dividend is multiplied by 10, the quotient is multiplied by 10.

## Example 2

**Study the division sentences. What pattern do you see?**

$$18{,}000 \div 9 = 2{,}000$$
$$18{,}000 \div 90 = 200$$
$$18{,}000 \div 900 = 20$$
$$18{,}000 \div 9{,}000 = 2$$

If the dividend stays the same and the divisor is multiplied by 10, the quotient is divided by 10.

## Guided Practice

**Find each quotient. Use basic facts and patterns to help.**

**1. a.** $25 \div 5 =$ _____

   **b.** $250 \div 5 =$ _____

   **c.** $2{,}500 \div 5 =$ _____

   **d.** $25{,}000 \div 5 =$ _____

**2. a.** $36 \div 6 =$ _____

   **b.** $360 \div 6 =$ _____

   **c.** $3{,}600 \div 6 =$ _____

   **d.** $36{,}000 \div 6 =$ _____

**3. a.** $8{,}100 \div 9 =$ _____

   **b.** $8{,}100 \div 90 =$ _____

   **c.** $8{,}100 \div 900 =$ _____

**4. a.** $42{,}000 \div 6 =$ _____

   **b.** $42{,}000 \div 60 =$ _____

   **c.** $42{,}000 \div 600 =$ _____

   **d.** $42{,}000 \div 6{,}000 =$ _____

## SKILL 23: Practice

**Find each quotient. Use mental math and the patterns.**

1. **a.** $56 \div 7 =$ _____
   **b.** $560 \div 7 =$ _____
   **c.** $5,600 \div 7 =$ _____
   **d.** $56,000 \div 7 =$ _____

2. **a.** $36,000 \div 4 =$ _____
   **b.** $36,000 \div 40 =$ _____
   **c.** $36,000 \div 400 =$ _____
   **d.** $36,000 \div 4,000 =$ _____

3. $2,400 \div 6 =$ _____

4. $27,000 \div 90 =$ _____

5. $350 \div 7 =$ _____

6. $1,800 \div 30 =$ _____

7. $32,000 \div 8 =$ _____

8. $6,000 \div 200 =$ _____

9. $4,000 \div 500 =$ _____

10. $6,300 \div 70 =$ _____

11. $1,600 \div 400 =$ _____

12. $720 \div 90 =$ _____

13. $1,200 \div 3 =$ _____

14. $49,000 \div 700 =$ _____

15. $48,000 \div 8 =$ _____

16. $8,100 \div 900 =$ _____

17. $24,000 \div 8,000 =$ _____

18. $2,800 \div 400 =$ _____

19. $320 \div 80 =$ _____

20. $30,000 \div 6 =$ _____

**Solve.**

21. Delia earns $120 after working for 10 hours. What is her hourly rate of pay? _____

22. Each New Town bus holds 40 passengers. How many buses are needed to transport 2,000 people? _____

### TEST PREP

23. Four students shared a $2,800 prize equally. How much money did each receive?

    *Skill 23*

    **A** $60        **C** $600
    **B** $70        **D** $700

24. Eugene saved $256. He spent $192 on some new speakers. Which is the best estimate of how much he has left after his purchase?

    *Skill 6*

    **F** $40        **H** $400
    **G** $60        **J** $460