

EXERCISES

For more practice, see *Extra Practice*.

A Practice by Example

Use the **Distributive Property** to simplify each expression. Exercises 1 and 2 have been started for you.

Example 1 (page 106)

1. $4 \times 18 = 4 \times (10 + 8) = (4 \times \blacksquare) + (4 \times \blacksquare) = \blacksquare + \blacksquare = \blacksquare$

2. $4 \times 18 = 4 \times (20 - 2) = (4 \times \blacksquare) - (4 \times \blacksquare) = \blacksquare - \blacksquare = \blacksquare$

3. 8×28

4. 5×63

5. 12×34

Example 2 (page 106)

6. **Fundraising** Your class is selling Earth Day posters for \$2.90 each. On the first day of sales, your class sold 8 posters. How much money did your class collect on the first day of sales?

7. A group of 6 students plan to go to a skating rink. The rink charges \$4.50 per person. Find the total cost for the group.

B Apply Your Skills

Use the **Distributive Property** to simplify each expression.

8. 7×83

9. 3×2.9

10. 9×48

11. 5×1.9

12. 6×99

13. 11×8.7

14. **Money** Mr. Garcia's company pays him 32.5 cents per mile for gasoline and car maintenance when he uses his car for company business. How much money does he receive for driving 40 miles on company business?

15. **Fundraising** There are 53 people walking in a fundraising event. Each participant walks 5 miles. How many total miles do the participants walk?

16. **Gardening** Your school's ecology club plants 8 rows of sunflowers in a vacant lot. Each row has 27 plants. Find the total number of sunflowers that the ecology club plants.

17. **Writing in Math** Describe two ways to find the total area of the rectangle at the right.



C Challenge

Algebra Copy and complete each equation.

18. $4(7 - y) = (4 \cdot 7) - (4 \cdot \blacksquare)$

19. $9(a + b) = (\blacksquare \cdot a) + (9 \cdot \blacksquare)$

20. **Stretch Your Thinking** Change two operations in the expression below so that the value of the expression is 35.

$$5 + 5 + 5 + 5 + 5 + 5$$



Test Prep

Multiple Choice

21. Which of these expressions is NOT equivalent to 19×12 ?
- A. $(19 \times 10) + (19 \times 2)$ B. $(10 \times 12) + (9 \times 12)$
 C. $(20 \times 12) - (1 \times 12)$ D. $(10 \times 10) + (9 \times 2)$
22. A family is buying carpeting for two rooms. One room measures 15 feet by 17.5 feet and the other is 17.5 feet by 20 feet. Which expression gives the total square feet of carpet that the family is buying?
- F. 35×35 G. 32.5×37.5 H. 17.5×35 I. 15×37.5
23. Which expression is NOT equivalent to the others?
- A. $(3 \times 5) + (2 \times 5)$ B. $3 \times (5 + 2)$
 C. $(3 + 2) \times 5$ D. $(2 + 3) \times 5$



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Mixed Review

Lesson 2-5

Tell whether each equation is true or false.

24. $5 \times 3 = 8$

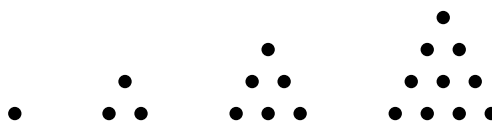
25. $0 \times 9.8 = 9.8$

26. $1 \times 6.7 = 6.7$

Lesson 2-1

27. **Algebra** Write the next two terms in the following pattern.
1, 2, 4, 8, 16, ...

28. **Geometry** Draw the next two figures in the pattern.



Math at Work

Bicycle Designer

Bicycle designers combine visual, artistic, and mathematical skills to make bicycle designs. They use mathematical patterns to find the size of the wheels, the shape of the frame, the number of gears, and the manner in which these parts will work together.



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