

# Practice 5

For use with Section 1-5

Rewrite each product as a sum or difference. Do not calculate.

- |                  |                  |
|------------------|------------------|
| 1. $3(50 + 25)$  | 2. $6(200 - 30)$ |
| 3. $7(100 + 10)$ | 4. $5(200 - 30)$ |
| 5. $2(140 - 50)$ | 6. $4(500 + 15)$ |
| 7. $9(400 - 40)$ | 8. $8(100 + 60)$ |

Use the distributive property to find each sum or difference mentally.

- |                                |                                |                                  |
|--------------------------------|--------------------------------|----------------------------------|
| 9. $19 \cdot 6 + 19 \cdot 4$   | 10. $22 \cdot 13 - 22 \cdot 3$ | 11. $170 \cdot 35 - 70 \cdot 35$ |
| 12. $17 \cdot 28 + 3 \cdot 28$ | 13. $45 \cdot 21 - 45$         | 14. $15 \cdot 93 + 15 \cdot 7$   |

Use the distributive property to rewrite each expression without parentheses.

- |                            |                             |                             |
|----------------------------|-----------------------------|-----------------------------|
| 15. $3(x + y)$             | 16. $5(p - 2q)$             | 17. $7(3a - b^2)$           |
| 18. $\frac{1}{2}(4w - 12)$ | 19. $\frac{1}{7}(7u + 56v)$ | 20. $\frac{1}{3}(24 - 15n)$ |

Combine like terms.

- |                               |                            |
|-------------------------------|----------------------------|
| 21. $5x - 2x$                 | 22. $7a^2 - 3 + 2a^2$      |
| 23. $8y + 5y^3 - 3y$          | 24. $6(r + 8) - r$         |
| 25. $10m + 4(3 - m)$          | 26. $9(2j^2 - j) - 3j^2$   |
| 27. $2(3x + 2y) + 10(x + 2y)$ | 28. $5(2a - 3) + 7(a + 6)$ |

For Exercises 29 and 30, use the diagram.

29. The diagram contains a large rectangle and small rectangles. Write expressions for the areas of the small rectangles and for the whole figure.

30. Write expressions for the length and width of the whole figure. Using these expressions, write an expression for the area of the whole figure. Is this expression equal to what you got in Exercise 29?

