

2.5 EXERCISES

HOMEWORK
KEY

○ = WORKED-OUT SOLUTIONS
on p. WS1 for Exs. 9, 23, and 51

TEXAS = TAKS PRACTICE AND REASONING
Exs. 27, 52, 54, 56, and 57

SKILL PRACTICE

1. **VOCABULARY** What are the coefficients of the expression $4x + 8 - 9x + 2$?

2. **WRITING** Are the expressions $2(x + 1)$ and $2x + 1$ equivalent? *Explain.*

ERROR ANALYSIS *Describe and correct the error in simplifying the expression.*

3.

$$\begin{aligned}5y - (2y - 8) &= 5y - 2y - 8 \\&= 3y - 8\end{aligned}$$

4.

$$\begin{aligned}\theta + 2(4 + 3x) &= \theta + \theta + 6x \\&= 22x\end{aligned}$$

**EXAMPLES
1 and 2**

on pp. 96–97
for Exs. 5–20

USING THE DISTRIBUTIVE PROPERTY Use the distributive property to write an equivalent expression.

5. $4(x + 3)$

9. $(p - 3)(-8)$

13. $6v(v + 1)$

17. $\frac{1}{2}(\frac{1}{2}m - 4)$

6. $8(y + 2)$

10. $-4(q - 4)$

14. $-w(2w + 7)$

18. $-\frac{3}{4}(p - 1)$

7. $(m + 5)5$

11. $2(2r - 3)$

15. $-2x(3 - x)$

19. $\frac{2}{3}(6n - 9)$

8. $(n + 6)3$

12. $(s - 9)9$

16. $3y(y - 6)$

20. $\frac{5}{6}r(r - 1)$

EXAMPLE 3
on p. 97
for Exs. 21–26

IDENTIFYING PARTS OF AN EXPRESSION Identify the terms, like terms, coefficients, and constant terms of the expression.

21. $-7 + 13x + 2x + 8$

23. $7x^2 - 10 - 2x^2 + 5$

25. $2 + 3xy - 4xy + 6$

22. $9 + 7y - 2 - 5y$

24. $-3y^2 + 3y^2 - 7 + 9$

26. $6xy - 11xy + 2xy - 4xy + 7xy$

27. **TAKS REASONING** Which two terms are like terms?

(A) $-2, -5x$

(B) $4x, -x$

(C) $-2, -2y$

(D) $5x, -3y$

EXAMPLE 4
on p. 98
for Exs. 28–39

SIMPLIFYING EXPRESSIONS Simplify the expression.

28. $7x + (-11x)$

31. $(4a - 1)2 + a$

34. $15t - (t - 4)$

37. $7(w - 5) + 3w$

29. $6y - y$

32. $3(2 - c) - c$

35. $3(m + 5) - 10$

38. $6(5 - z) + 2z$

30. $5 + 2n + 2$

33. $6r + 2(r + 4)$

36. $-6(v + 1) + v$

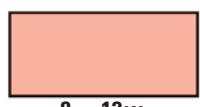
39. $(s - 3)(-2) + 17s$

GEOMETRY Find the perimeter and area of the rectangle.

40.



41.



42.

