

p. 565 #9-39 odd, 49, 50

USING TABLES Use a table to find the product.

9. $(x + 2)(x - 3)$

11. $(4b - 3)(b - 7)$

13. $(3k - 1)(4k + 9)$

ERROR ANALYSIS Describe and correct the error in finding the product of the polynomials.

15.

$(x - 5)(3x + 1)$

	$3x$	1	
x	$3x^2$	x	X
5	$15x$	5	

$(x - 5)(3x + 1) = 3x^2 + 16x + 5$

MULTIPLYING POLYNOMIALS Use a vertical or a horizontal format to find the product.

17. $(y + 6)(y - 5)$

19. $(7w + 5)(11w - 3)$

21. $(s + 4)(s^2 + 6s - 5)$

23. $(5x + 2)(-3x^2 + 4x - 1)$

25. $(6z^2 + z - 1)(9z - 5)$

USING THE FOIL PATTERN Use the FOIL pattern to find the product.

27. $(2r - 1)(5r + 3)$


29. $(4m + 9)(2m + 7)$

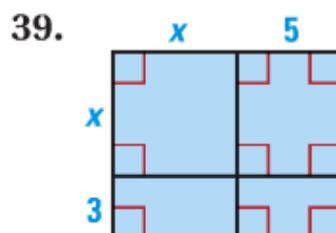
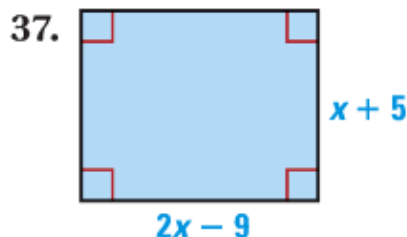
31. $(4x - 5)(12x - 7)$

SIMPLIFYING EXPRESSIONS Simplify the expression.

33. $p(2p - 3) + (p - 3)(p + 3)$

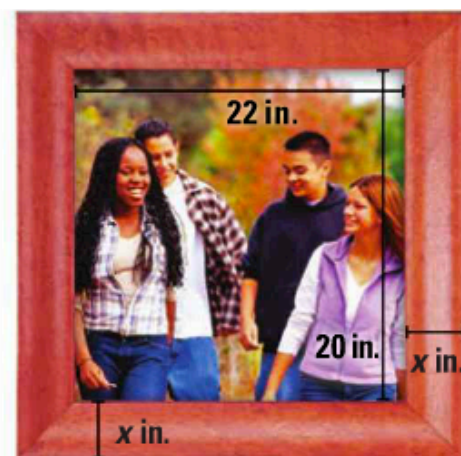
35. $-3c^2(c + 11) - (4c - 5)(3c - 2)$

 **GEOMETRY** Write a polynomial that represents the area of the shaded region.



49. **PICTURE FRAME** You are designing a frame to surround a rectangular picture. The width of the frame around the picture is the same on every side, as shown.

- Write a polynomial that represents the total area of the picture and the frame.
- Find the combined area of the picture and the frame when the width of the frame is 4 inches.



50. **SWIMMING POOL** A rectangular swimming pool is bordered on one side by a deck. A contractor is hired to build a walkway along the remaining three sides of the pool. The width of the walkway is the same on every side, as shown.

- Write a polynomial that represents the total area of the pool and the walkway.
- Find the combined area of the pool and the walkway when the width of the walkway is 5 feet.

