

p. 565 #3-8, 38, 41, 44, 55-60

MULTIPLYING POLYNOMIALS Find the product.

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

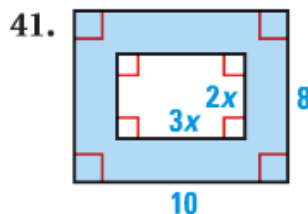
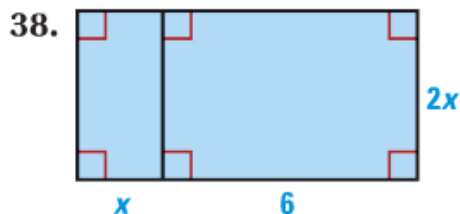
4. $4y(-y^3 - 2y - 1)$

5. $z^2(4z^4 + z^3 - 11z^2 - 6)$

6. $3c^3(8c^4 - c^2 - 3c + 5)$

7. $-a^5(-9a^2 + 5a + 13)$

8. $-5b^3(4b^5 - 2b^3 + b - 11)$

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

44. **★ MULTIPLE CHOICE** Which polynomial represents $f(x) \cdot g(x)$ if $f(x) = -2x^2$ and $g(x) = x^3 - 5x^2 + 2x - 1$?

Ⓐ $-2x^5 - 10x^4 + 4x^3 - 2x^2$

Ⓑ $-2x^5 + 10x^4 - 4x^3 - 2x^2$

Ⓒ $-2x^5 + 10x^4 - 4x^3 + 2x^2$

Ⓓ $2x^5 - 10x^4 + 4x^3 - 2x^2$

Simplify the expression.

55. $5(2x - 7) + 5x$

56. $2x + 3(4x - 1)$

57. $15x - 7(x + 3)$

58. $-2x(x + 1) + 2x$

59. $x(x - 4) - 9x$

60. $11x + (x - 1)(8x)$