

7.2 Practice A

In Exercises 1–3, use the Distributive Property to find the product.

1. $(x + 4)(x + 5)$ 2. $(x + 1)(x - 6)$ 3. $(x - 2)(x - 7)$

In Exercises 4–6, use a table to find the product.

4. $(y + 4)(y + 2)$ 5. $(q + 4)(q - 7)$ 6. $(2x - 3)(x - 1)$

7. Describe and correct the error in finding the product of the binomials.

\times $(x - 2)(5 - x)$

	x	5
x	x^2	$5x$
-2	$-2x$	-10

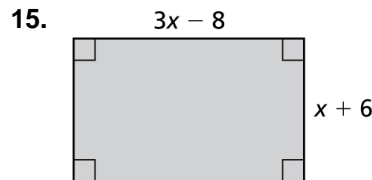
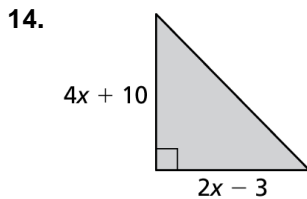
$(x - 2)(5 - x) = x^2 + 3x - 10$

In Exercises 8–13, use the FOIL Method to find the product.

8. $(u + 2)(u + 9)$ 9. $(w + 6)(w - 5)$ 10. $(m - 1)(m + 8)$

11. $(y - 6)(y - 3)$ 12. $(q + \frac{1}{2})(q - \frac{3}{2})$ 13. $(2 - 5t)(7 - t)$

In Exercises 14 and 15, write a polynomial that represents the area of the shaded region.



In Exercises 16–18, find the product.

16. $(x + 2)(x^2 + 5x + 1)$ 17. $(y + 5)(y^2 + 2y - 6)$ 18. $(h - 7)(h^2 - 3h + 2)$

19. When multiplying a binomial by a trinomial, is the degree of the product always 5? Explain.

7.2

Practice B

In Exercises 1–3, use the Distributive Property to find the product.

1. $(p - 5)(p - 8)$ 2. $(5t + 1)(t - 2)$ 3. $(4v - 3)(v + 7)$

In Exercises 4–6, use a table to find the product.

4. $(2p + 4)(5p - 1)$ 5. $(-4 + 3r)(7r - 2)$ 6. $(4t - 9)(-6 + 2t)$

7. Describe and correct the error in finding the product of the binomials.

\times $(x - 2)(5 - x)$

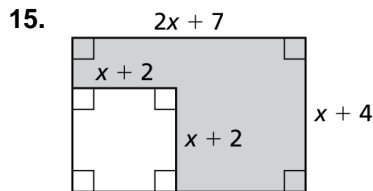
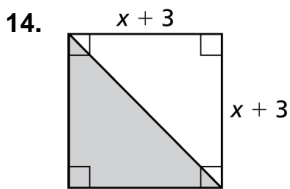
	5	$-x$
x	$5x$	$-x^2$
-2	-10	$2x$

$(x - 2)(5 - x) = 4x^2 + 2x - 10$

In Exercises 8–13, use the FOIL Method to find the product.

8. $(z + 9)(z - 8)$ 9. $(m - \frac{2}{5})(m + \frac{4}{5})$ 10. $(4 - x)(8 - 3x)$
 11. $(9 - 6g)(2g + 3)$ 12. $(p + 4)(p^2 + 7p)$ 13. $(d - 2)(d^2 - 5d)$

In Exercises 14 and 15, write a polynomial that represents the area of the shaded region.



In Exercises 16–18, find the product.

16. $(x + 10)(3x^2 + 5x - 2)$ 17. $(2t^2 - 9t - 5)(3t + 7)$ 18. $(3r^2 + 3r - 8)(5 - 2r)$
 19. Write two polynomials that are not monomials, whose product is a trinomial of degree 4.