

2.2

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.

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

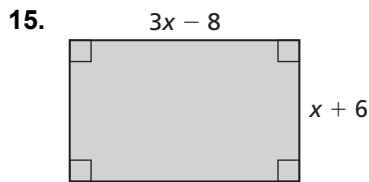
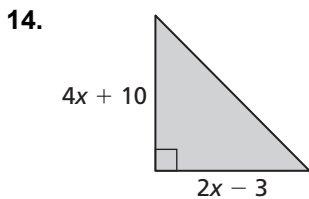
| | | |
|----|-------|-------|
| | x | 5 |
| x | x^2 | $5x$ |
| -2 | $-2x$ | -10 |

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

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.