

2.5

Practice B

In Exercises 1–12, factor the polynomial.

1. $x^2 + 5x + 4$

2. $w^2 + 9w + 14$

3. $y^2 + 15y + 36$

4. $x^2 - 14x + 45$

5. $j^2 - 16j + 39$

6. $m^2 - 19m + 90$

7. $y^2 + 2y - 35$

8. $w^2 - 8w - 20$

9. $b^2 - b - 30$

10. $p^2 - 6p - 27$

11. $q + q^2 - 56$

12. $-36 + t^2 + 5t$

13. Describe and correct the error in factoring the polynomial.

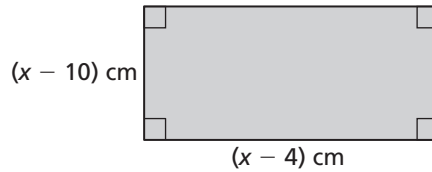
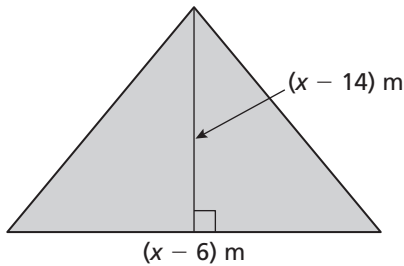
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$$x^2 + 4x - 96 = (x - 12)(x + 8)$$

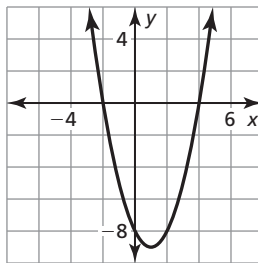
In Exercises 14 and 15, find the dimensions of the polygon with the given area.

14. Area = 120 m^2

15. Area = 55 cm^2



16. The graph shows $y = x^2 - 2x - 8$.



- a. Explain how you can use the graph to factor the polynomial.
- b. Factor the polynomial.