

# 2.6

## Practice B

In Exercises 1–12, factor the polynomial.

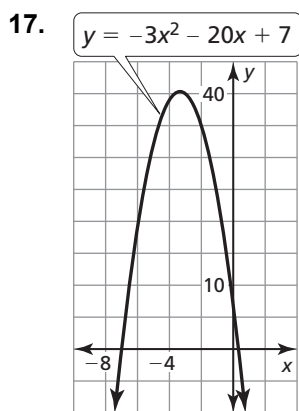
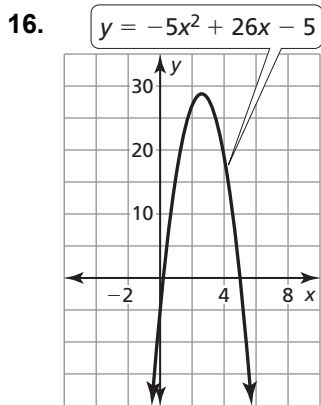
- |                       |                        |                         |
|-----------------------|------------------------|-------------------------|
| 1. $5x^2 - 5x - 30$   | 2. $8x^2 - 16x - 192$  | 3. $6x^2 + 48x + 42$    |
| 4. $2x^2 + 17x - 9$   | 5. $12p^2 - 7p - 10$   | 6. $10w^2 + 24w + 8$    |
| 7. $3y^2 + y - 14$    | 8. $12j^2 - 32j + 5$   | 9. $15d^2 + 16d - 15$   |
| 10. $-9v^2 - 22v - 8$ | 11. $-14m^2 + 13m - 3$ | 12. $-20q^2 + 56q - 15$ |
13. Describe and correct the error in factoring the polynomial.

$\times \quad 6x^2 - 4x + 2 = (2x - 2)(3x + 1)$

In Exercises 14 and 15, solve the equation.

14.  $-12w^2 + 20w - 3 = 0$                       15.  $18t^2 - 2 = 5t$

In Exercises 16 and 17, find the x-coordinates of the points where the graph crosses the x-axis.



18. The length of a rectangular patio is 8 feet less than twice its width. The area of the patio is 280 square feet. Find the dimensions of the patio.
19. For what values of  $t$  can  $6x^2 + tx + 25$  be written as the product of two binomials?

In Exercises 20 and 21, factor the polynomial.

20.  $-10r^2 - 11sr + 6s^2$                       21.  $12x^3 + 8x^2y - 20xy^2$