

In Exercises 3–8, factor the polynomial. (See Example 1.)

3. $3x^2 + 3x - 6$

4. $8v^2 + 8v - 48$

5. $4k^2 + 28k + 48$

6. $6y^2 - 24y + 18$

7. $7b^2 - 63b + 140$

8. $9r^2 - 36r - 45$

In Exercises 9–16, factor the polynomial.

(See Examples 2 and 3.)

9. $3h^2 + 11h + 6$

10. $8m^2 + 30m + 7$

11. $6x^2 - 5x + 1$

12. $10w^2 - 31w + 15$

13. $3n^2 + 5n - 2$

14. $4z^2 + 4z - 3$

15. $8g^2 - 10g - 12$

16. $18v^2 - 15v - 18$

In Exercises 17–22, factor the polynomial.

(See Example 4.)

17. $-3t^2 + 11t - 6$

18. $-7v^2 - 25v - 12$

19. $-4c^2 + 19c + 5$

20. $-8h^2 - 13h + 6$

21. $-15w^2 - w + 28$

22. $-22d^2 + 29d - 9$