

7.8 Notetaking with Vocabulary (continued)**Extra Practice**

In Exercises 1–8, factor the polynomial by grouping.

1. $b^3 - 4b^2 + b - 4$

2. $ac + ad + bc + bd$

3. $d^2 + 2c + cd + 2d$

4. $5t^3 + 6t^2 + 5t + 6$

5. $8s^3 + s - 64s^2 - 8$

6. $12a^3 + 2a^2 - 30a - 5$

7. $4x^3 - 12x^2 - 5x + 15$

8. $21h^3 + 18h^2 - 35h - 30$

7.8 Notetaking with Vocabulary (continued)

In Exercises 9–16, factor the polynomial completely.

9. $4c^3 - 4c$

10. $100x^4 - 25x^2$

11. $2a^2 + 3a - 2$

12. $9x^2 + 3x - 14$

13. $20p^2 + 22p - 12$

14. $12x^2 - 20x - 48$

15. $3s^3 + 2s^2 - 21s - 14$

16. $2t^4 + t^3 - 10t - 5$

In Exercises 17–22, solve the equation.

17. $3x^2 - 21x + 30 = 0$

18. $5y^2 - 5y - 30 = 0$

19. $c^4 - 81c^2 = 0$

20. $9d + 9 = d^3 + d^2$

21. $48n - 3n^2 = 0$

22. $x^3 + 3x^2 = 16x + 48$