

Practice 6-4

Solving Polynomial Equations

Factor the expression on the left side of each equation. Then solve the equation.

1. $8x^3 - 27 = 0$

2. $x^3 + 64 = 0$

5. $4x^3 - 32 = 0$

6. $27x^3 + 1 = 0$

9. $x^4 - 5x^2 + 4 = 0$

10. $x^4 - 12x^2 + 11 = 0$

11. $x^4 - 10x^2 + 16 = 0$

12. $x^4 - 8x^2 + 16 = 0$

13. $x^4 - 9x^2 + 14 = 0$

14. $x^4 + 13x^2 + 36 = 0$

Factor each expression. **DO NOT SOLVE.**

25. $x^3 - 125$

26. $x^4 - 8x^2 + 15$

27. $x^4 + x^2 - 2$

28. $x^3 + 1$
