

Unit 6 Quiz Review

Name each polynomial by degree and number of terms.

1. $-3x^5 - 10x^4 - x^3 + 4x$

2. $-8x^4 + 2x^3 + 9x^5$

3. k^4

4. $7n - 4 + 3n$

Simplify each of the polynomials by performing the indicated operation.

5. $(-5m^2 - m + 4) + (-3m^2 - 5m + 2)$

6. $(3p^3 + 3p^2 + 9) - (5p^3 - 7p^2 + 6p - 9)$

7. $(x - 8)(x - 7)$

8. $(x + 6)(x + 2) - (5x^3 + 3x^2 - 5)$

Solve each equation.

9. $5x^2 - 35x + 60 = 0$

10. $x^3 + 11x^2 - 12x = 0$

11. $28x^3 + 16x^2 - 21x - 12 = 0$

12. $80x^2 = -15x$

13. $x(x - 3)(x^2 - 25)(x^2 + x - 12) = 0$

14. $6x^2 - 2 = x$

15. $9x^2 - 1 = 0$

16. $18x^3 - 9x^2 - 24x + 12 = 0$