

Basic Polynomial Operations

Name each polynomial by degree and number of terms.

1) $-10x$

2) $-10r^4 - 8r^2$

3) 7

4) $9a^6 + 3a^5 - 4a^4 - 3a^2 + 9$

5) $-3n^3 + n^2 - 10n + 9$

6) $7x^2 - 9x - 10$

7) $-4b$

8) $-9 + 7n^3 - n^2$

9) Critical thinking: Why is it impossible to have a linear trinomial with one variable?

Simplify each expression.

10) $(4m^4 - m^2) + (5m^2 + m^4)$

11) $(5x + x^4) - (3x^4 + 4x)$

12) $(5 + 7x^3 + 3x^2) + (-12 + 5x + 6x^2)$

13) $(4 + 3x^2 + 8x^3) + (-7x^3 + 12x^5 + 6x^2)$