

Name : _____ Score : _____
Teacher : _____ Date : _____

Basic Polynomial Operations

Name each polynomial by its degree and number of terms.

1) $5dq^3 - 2y^6 + 7n^7h^2$

2) $6k^m + k^2$

3) $-9nh^3 + 5c^6 + 6r^4g^7 + 2p^3d^7 - 7c^2r^4$

4) $3sr^6x$

Simplify each expression.

5) $(9 + 2z^2) - (5z^6 + 6 + 8z^2) - (4 - 7z - 3z^5)$

6) $(7x^4 - 5x^2 - 9x) - (3x^2 - 4x) + (2 + 8x^3 + 6x^4)$

7) $(5r - 8r^4) - (2r + 6r^4 + 7)$

8) $(2c^3 - 3c^5) - (6c^6 + 9c^3)$

Multiply to find each product.

9) $(7p^2 + 3p)(9p^2 + 2p + 5)$

10) $(n^2 + 3n + 2)(n^2 + 8n + 4)$

11) $(d^2 + 2)(d^2 + 9d + 4)$

12) $(5s^2 + 8)(7s^2 + 9)$

