Algebra II CW 6.1-6.3 Polynomials

Classify by degree and type of polynomial

1. $3x^2 + 2y$

2. $3x^4 y^3 + 2y^5 - 1$

Add, subtract, or multiply the given polynomials:

3. $\left(3x^2 + 2x - 5\right) + \left(-5x^2 + 6x + 12\right)$

4. $\left(-5x^2 + 2x + 2\right) - \left(-5x^2 + 6x^3 + 10\right)$

5. $\left(x^4 + 3x - 5\right)\left(-2x^2 + 3x + 8\right)$

6. Write #5 in descending order.

7. Expand: $\left(2x - 2y\right)^4$

8. What is the coefficient of the 5th term of : $\left(2x + 3y\right)^9$

9. What is the 6th term of : $\left(x + 2y\right)^{11}$

10. $\dfrac{x^5 - 2x^3 + 8x - 18}{x^3 + 2x}$