

Check-Up:

- ① Given $(-3x^7 + 4y^3)^{16}$. What is the numerical coefficient for the term with the variable part $x^{35} y^{33}$? $\binom{16}{11} (-3x^7)(4y^3)^{11}$
 $4368x^{24}y^{33}$
 4199304

- ② Factor fully:

$$\text{(a)} \quad x^3 + 64 \quad \text{(b)} \quad 27x^6 - 1 \quad \text{(c)} \quad x^{12} - 1$$

$$(x+4)(x^2-4x+16) \quad (3x^2-1)(9x^4+3x^2+1)$$

$$\text{(d)} \quad (x^4-1)(x^8+x^4+1)$$

$$(x^2-1)(x^2+1)(x^8+x^4+1)$$

$$(x-1)(x+1)(x^2+1)(x^8+x^4+1)$$

$$\text{(e)} \quad (x^6-1)(x^6+1)$$

$$(x^2-1)(x^4+x^2+1)(x^2+1)(x^4-x^2+1)$$

$$\underline{(x-1)(x+1)(x^4+x^2+1)(x^2+1)(x^4-x^2+1)}$$

Polynomials Review

- Factoring Techniques
- Dividing Polynomials
- Remainder Theorem
- Factor Theorem
- Sum and Difference of Cubes
- Solving Polynomial Equations
- Permutations and Combinations
- Binomial Theorem

Review-Polynomials.pdf



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#6, 7, 8 Pg. 547
#16, 17 Pg. 548
#5, 12