

## Unit 7B PC Review

Date \_\_\_\_\_ Period \_\_\_\_\_

**Name each polynomial by degree and number of terms.**

1)  $-2a^2 + 4a + 2$

2)  $4n^3 - 6 + 8n^2 - 3n^5$

3)  $-8 - 10n^2$

4)  $-6a$

**Write the polynomial in standard form. Identify the leading coefficient.**

5)  $8r^2 + 8r^6$

6)  $-4x^4 - 2x + 4x^6$

7)  $2 - 7x - 6x^2 - 6x^3$

8)  $-3a^4 - 3a^5 - 4$

**Simplify each expression. Put your answer in standard form.**

9)  $(4p^2 + 7p^3 - 3p) + (8p^2 - 3p^3 + 7p)$

10)  $(8b^3 + 4b^4 + 2b^2) + (2b^2 - 8b + 2b^4)$

11)  $(7 - 2x^4 + 3x) - (2 + 8x^4 - 8x)$

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

**Find each product. Put your answer in standard form.**

13)  $4x^2(x^2 - 3x - 4)$

14)  $(3v + 4)(6v - 8)$

15)  $(n + 4)(4n - 6)$

16)  $(k + 1)(2k^2 - 4k - 7)$

17)  $(3x - 8)^2$

18)  $(4a + 5)^2$

19)  $(8x - 3y)(8x - y)$

20)  $(8x - 2y)(3x^2 - 7xy - 7y^2)$

**Given a rectangle with length  $(2xy + 3x)$  and width  $(5x^2 + 4y)$ :**

21) Find the perimeter of the rectangle.

22) Find the area of the rectangle.

**Given a rectangle with width  $(2x + 3)$  and length  $(3x^2 - 5x + 4)$ :**

23) What is the perimeter of the rectangle?

24) What is the area of the rectangle?