

Unit 6 Hw #4 Sect. 6.1-6.3

Date _____ Period _____

Write each polynomial in standard form and then classify each polynomial by degree and number of terms.

1) -9

2) $-10 + 6x^2$

3) $5r^3 + r + 7 - 9r^2$

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

Simplify each expression. Write your answers in standard form and classify each one based on its degree and number of terms.

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

6) $(-11m^3 - m + 11) + (6m^3 + 5 - 11m)$

7) $(-2 + 4k + 2k^4) - (12k - 6k^4 + 8)$

8) $(3x - 4x^4 - 6x^2) + (8x^4 + 6x + 6x^2) - (-10x^2 + 10x - 12x^4)$

9) $(-2n^2 - 10n - 8) - (-8n + n^2 - 12) + (-11 - 4n^4 + 7n^2)$

10) $(11k^3 + k^2 - 8k^4) - (k^4 - 2k^2 + 9k^3) - (3k^3 - 2k^2 - 9k^4)$

Find each product. Write your answer in standard form.

11) $12(9v - 1)$

12) $10(7v^2 + 9v - 10)$

13) $(10x + 8)(11x + 10)$

14) $(4n + 2)(5n + 7)$

15) $(x - 11)(8x + 8)$

16) $(7n + 11)(4n + 6)$

17) $(7m + 5)^2$

18) $(12a + 8)(12a - 8)$

19) $(12p + 12)^2$

20) $(12x - 10)(12x + 10)$

21) $(12x + y)(x - 5y)$

22) $(x + y)(11x - 10y)$

23) $(6k - 5)(8k^2 - 8k - 11)$

24) $(8x + 2)(4x^2 - 5x - 6)$