Name: _____ **Unit** : Polynomials

Date: _____ **Bell:** _____ **Homework 1:** Classifying Polynomials

Directions: Classify the following polynomials by degree and number of terms.	
1. $3x + 12$	**2.** $-7x^2 + 4x - 1$
3. $x^3 - 8$	**4.** 24
5. $2x^4 - x^3 + 5x^2 + x - 7$	**6.** $10x$

Directions: Write the following polynomials in standard form, and identify leading coefficient.	
7. $y^2 + 3y^4 - 7y + 2y^3 - 4$ LC: ____	**8.** $9x^4 - 2x^2 + 7x - 8x^3 + x^5 - 4$ LC: ____
9. $-2b^2 + 5ab + 7a^2$ LC: ____	**10.** $-3m^2n^2 + 8mn^3 + m^3n$ LC: ____
11. $a^2 + 3a^4 - 7a + 2a^3 - 4$ LC: ____	**12.** $8y^3 - 3xy^2 - x^2y + 2x^3$ LC: ____

Classifying Polynomials

Directions: Classify each polynomial by degree and number of terms.	
13. $3x + 12$	**14.** 24
15. $-7x^2 + 4x + 1$	**16.** $3x^4 - x^3 + 5x^2 + x - 7$

Classify the following polynomials by <u>degree</u> and <u>number of terms</u>.

17. $4p^3 + 2p^2 + 19p - 5$ _____

18. $5x^4 + 12$ _____

19. $n^2 - 7n - 21$ _____

20. 3 _____

21. $2x + 7$ _____

22. $-8y^2$ _____