Name: _____ Unit : Polynomials & Factoring

Date: _____ Bell: _____ Unit Review

| ** This is a   document! ** |

Polynomial Basics

1. Write in standard form the following polynomials in standard form:

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

_____

b) $7xy + x^3 - 3y^3 - 5x^2y^2$

_____

2. Classify the following polynomials by degree and number of terms.

a) $3x + 1$ _____

b) $5x^2$ _____

c) $x^4 - 2x + 8$ _____

d) 10 _____

e) $x^3 - 5x^2 + 7x - 3$ _____

Simplifying Polynomials

3. $(y^2 + 4y - 1) + (5y^2 + 2)$	**4.** $(5k^2 - 9k + 1) - (8k + 13)$
5. $(7x^3 + 2x^2 - x - 4) - (4x^3 - 3x^2 + 8)$	**6.** $(7m^4 + 6m^2 + 7) + (2m^4 - 3m^2 + 1)$
7. $(x + 3)(2x + 3)$	**8.** $(9w - 1)(7w + 4)$
9. $(2a + 7)^2$	**10.** $(x - 6)(4x^2 + x - 7)$
11. $(2y + 17)(y + 1)$	**12.** $(n + 2)(n - 2)$
13. $(x - 5)^2 - 3(x + 8)$	**14.** $7x^3y(x^2y - 3x + 2) + 5x^4y$