SM 2

Date: **Section:**

Objective:

Constant:

Coefficient:

Variable:

Expression:

Terms:

Monomial:

Monomials: **Not Monomials:**

Binomial:

Trinomial:

Polynomial:

Like Terms:

Standard form:

How to find the degree of a polynomial:

Reasons for not a polynomial:

Examples: Decide whether each expression is a polynomial. If it is, state the degree of the polynomial. If it is not, explain why not.

a) $5x^4 + 2x^3 + 6x$ b) $-\frac{4}{3}a - a^5$ c) $\frac{12}{m+2}$ d) $6c^{-2} + c - 1$

e) $6z^{\frac{1}{2}} + 5z^2 - 2$ f) 7 g) $-8n - 3$ h) $3\sqrt{x+2}$

Adding and Subtracting Polynomials Rules

1.

2.

3.

Examples: Simplify each expression.

a) $\left(5n^2 - 2\right) + \left(7 - 3n^2\right)$ b) $\left(2r^2 + 5r\right) + \left(r^2 - 4r\right)$

c) $\left(4x^2-3x+1\right)+\left(-2x^2+5x-6\right)$

d) $\left(7z^2+12z-5\right)+\left(6z-4z^2-3\right)$

e) $\left(2w^2+3w\right)-\left(4w^2+w\right)$

f) $\left(u^3-4u^2+u\right)-\left(2u^2-5u^3\right)$

g) $\left(-6x^2-3x+2\right)-\left(-4x^2-x+3\right)$

h) $\left(4y^2+12y-7\right)-\left(20y+5y^2-8\right)$

i) $\left(6m^2+5m\right)-\left(4m^2-2m\right)+\left(3m^2-7m\right)$

j) $\left(-2k+5\right)+\left(k^2-3k\right)-\left(-4k^2+8\right)$