Unit 9: Classifying Polynomials Name:_____

Directions: Please classify the following polynomials as monomial, binomial, trinomial, or polynomail. Some may not be polynomials, if so simply write "not a polynomial."

1. 5

2. $12x^5$

3. $14x+5$

4. $2x^4-10x^3-14x+5$

5. $x^{500}-12x^3+52x$

6. $42x^{-5}$

Directions: Determine the highest degree and leading coefficient of the following polynomials.

1. $10x^3+4x^2-10x+6$

_____ Degree _____ Leading Coefficient

2. $4x^2-15x^4+3x^2-7x+3$

_____Degree _____ Leading Coefficient

Directions: Write each polynomail in standard form.

1. $4x-5x^5+8x^6+5x^3-2x^2-5$

2. $5x^4-5x+4x^2+10-2x^3$

Directions: Create your own monomial, binomail, trinomial, and polynomial. Then identify the highest degree and leading coefficient. Lastly, be sure to write your example in Standard Form.

1. Monomail

2. Binomial

3. Trinomail

4. Polynomail