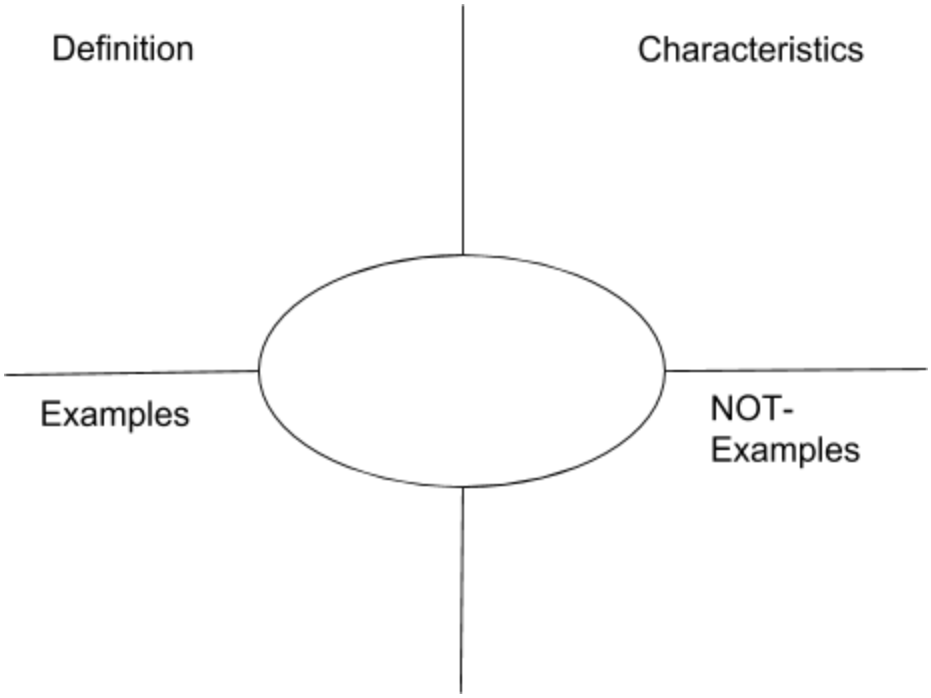
Unit 2 Polynomials

NOTES 1

Name: _____

Period: _____



POLYNOMIAL OR NOT?

Shade each polynomial. If it is not a polynomial, explain why.

$x^1 + x^2 + x^3 + \ldots$	$x^{1/2} + 2$
$x^4 - \frac{1}{8}x$	$4x^{-2} + 2x - 3$
$3/x$	12
$9\sqrt{x} + 2x$	$5x + 1$
$x^{4/2}$	$x^3 + x^4 + x^5$
$5 - \frac{4}{x^2}$	$5 - x^{11}$

Parts of a POLYNOMIAL

1 2 3 4 5 6

Naming Polynomials

Polynomials are named according to their degree and number of terms.

Polynomial:			
Degree	Name	# of Terms	Name

Degree	Name
0	
1	
2	
3	
4	
5	
n ≥ 6	

# Terms	Name
1	
2	
3	
n ≥ 4	

Unit 2 Polynomials Name: _____

NOTES 1 Period: _____

Part One: Classifying Polynomials: Write each polynomial in the correct column based on its name.

Polynomials

$4x - 3$	$4x^3 - 3$	$4x^2 - 2x + 1$	4,201	$-11z$
$5y^2 - 8$	$12x^3$	$5x^3 + 2x^2$	$2x^2 - 10x + 1$	-23
$2a$	$8g - 8$	$5x^2$	$3y^4$	$9x^4 + 9$
$-x^3$	$-10x^5$	$10x^2 - 8x + 8$	0	$2h^2 - 1{,}000$

Constant Monomial	**Linear Monomial**	**Quadratic Monomial**	**Cubic Monomial**
Fourth Degree Monomial	**Linear Binomial**	**Quadratic Binomial**	**Cubic Binomial**
Quadratic Trinomial	**Cubic Trinomial**	**Fourth Degree Binomial**	**Fifth Degree Monomial**

What is **STANDARD FORM……**

Write the polynomial in standard form.

1. $3y + 4y^2 - 5$
2. $5x^2 + 4 - 3x$
3. $x - 7x^3 + 2$