

Algebra 0507
Chapter 8
Intro to WS # 11

Name _____

Polynomials

What is a polynomial? _____

Degree of a Polynomial? _____

Expression	Polynomial?	Monomial, Binomial, Trinomial?	Degree
$3x - 7xyz$			
$-7x^4$			
-25			
$7n^3 + 3n^{-4}$			
$9x^3 + 4x + x + 4 + 2x$			

State whether each expression is a polynomial. If the expression is a polynomial, identify it as a monomial, binomial, or trinomial.

1. 36	2. $\frac{3}{q^2} + 5$	3. $7x - x + 5$
4. $8g^2h - 7gh + 2$	5. $\frac{1}{4y^2} + 5y - 8$	6. $6x - x^2$

Find the degree of each polynomial.

7. $4x^2y^3z$	8. $-2abc$	9. $s + 5t$
10. 22	11. $18x^2 + 4yz - 10y$	12. $2x^3y^2 - 4xy^3$

Adding & Subtracting Polynomials

Rule: _____

1. $\begin{array}{r} a^2 + ab - 3b^2 \\ (+) 4a^2 - ab + b^2 \\ \hline \end{array}$	2. $\begin{array}{r} 2x + 6y - 3z + 5 \\ 4x - 8y + 6z - 1 \\ (+) \quad x - 3y \quad + 6 \\ \hline \end{array}$
3. $\begin{array}{r} 7a^2 - a + 4 \\ (-) 3a^2 - 4a - 3 \\ \hline \end{array}$	4. $\begin{array}{r} 5e^2 - e - 7 \\ (-) -2e^2 + 3e + 4 \\ \hline \end{array}$
5. $(2x + 3y) + (4x + 9y)$	6. $(11m - 7n) - (2m + 6n)$
7. $(5x^2 - x - 7) - (2x^2 - 3x + 4)$	8. $(d^2 - d + 5) - (2d - 5)$