

Unit 1, Part 1 – Linear Functions

Algebra 1

January				
4 Teacher Workday	5 Teacher Workday	6 Read over Syllabus and Familiarize yourself with CTLS Class	7 Parts of an Expressions Operations w/ Poly	8 Operations w/ Poly
11 One/Two Step Equations Multistep Equations	12 Multistep Equations and Inequalities	13 Independent Workday QUIZ	14 Literal Equations	15 Word Problems
18 No School	19 Word Problems Review	20 Independent Workday TEST	21 Graphing Slope Intercept Form Graphing in Standard Form	22 Characteristics
25 Function Notation	26 Arithmetic Sequences	27 Independent Workday	28 Arithmetic Sequences Review QUIZ	29 Systems Graphing
February				
1 Substitution	2 Elimination	3 Independent Workday QUIZ	4 Word Problems	5 Word Problems Graphing Inequalities
8 Graphing Systems Inequalities	9 Review	10 Independent Workday TEST	11 GCF Grouping	12 Factoring

Expressions/Polynomials – Parts, Standard Form, Classifying

Terms: _____

Variables: _____

Coefficients: _____

Constants: _____

Like Terms: _____

Degree: _____

Examples:

1) $6x - 2y + x - 5$

2) $2c + b + 8a - 1$

Terms: _____

Terms: _____

Like Terms: _____

Like Terms: _____

Variables: _____

Variables: _____

Coefficients: _____

Coefficients: _____

Constants: _____

Constants: _____

★ **Standard Form of a Polynomial:** _____

_____ ★

Classifying Polynomials (Naming Polynomials)

By Degree		By Number of Terms	
Degree	Name	# of Terms	Name
0		1	
1		2	
2		3	
3		4 or more	
4			
5			
6 +			

Identifying Parts of Algebraic Expressions Practice

1) How many terms are in each of the following algebraic expressions?	Answers:
a) $6x^3 + 8x^2 - 4x$	
b) $15xy^3 + 21x^2 - 16$	
c) $19x^4 + 8x^2 + 4xy - 2$	
d) $8x^3 + 14x^5 - 20x^2 + 9x - 25$	
e) $9x^3y + 5x^4 - 24x^2 + 7x - 6x^6$	
f) $2ab + 7$	
g) $15xy + 7x + 2y + 9$	

2) Identify the coefficients, constants, and variables in each expression.	Coefficients	Constants	Variables
a) $81x^3 + 7xy^2 - 14x$			
b) $4x^3 + 8x^2 - 24$			
c) $61x^2 + 6x + 7$			
d) $4xyz^3 + 8x^2 - 2xy^2 + 29x - 46$			
e) $22a^3 + 38a^2 - 12b$			
f) $28a^2 - 17ab$			
g) $7x + 2xy$			

3) Identify the exponents in each expression.	Answers:
a) $12x^3y^2$	
b) $62x^4$	
c) $2x^2y$	
d) $125x^5$	
e) $9a^7$	
f) -12	
g) $-12ab^2c$	

4) List the like terms in each of the following algebraic expressions?	Answers:
a) $14xy^2 + 25x - 6x + 2$	
b) $8x^2 + 12x^2 - 9xy + 3x$	
c) $86x^3 + 42x - 36x^3 + 21y$	
d) $4x^2 + 6y - 6x + 7y$	
e) $36m^3 + 22m^2n^2 - 2m^2n^2 + 7m - 50$	

Standard Form and Classifying Polynomials Practice

	Standard Form	Classify by Degree	Classify by # of Terms
1) $-2x^2 - 3x^5 + 7$			
2) 7			
3) $6x^4$			
4) $7x^2 - 2x^2$			
5) $-2 + 4x^4$			
6) $5x^5 + 3x^3 - 2 - 4x$			
7) $-6x^2 + 9x^2$			
8) $-2x^3$			
9) $7 - 8x + 4x^3$			
10) $7x^2$			
11) $5 + 9x^3 + 3x^3$			
12) $-5 + x$			
13) $-8x^4 - 8x$			
14) $3x - 5x^2 - 2$			
15) $3x^3 + x$			