

Name: _____

Period: _____

Algebra 1

Chapter 8 Part 1: Quadratic Expressions and Equations

Targets	Learning Targets	Got it	Ok	No way
T 8-1	I can write polynomials in standard form, name leading coefficient, name degree and perform addition and subtraction on polynomials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T 8-2	I can multiply polynomials using the distributive & double distributive method.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T 8-3	I can multiply polynomials using FOIL method.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Target	Lesson/Activity	Homework Assignment o = only do odd problems	Turned In?
4/22	Chapter 7 Test	Ch 8 Vocabulary	
4/24	Chapter 7 Test Review Return/Go over Prom Project	Revisions of Prom Project Retake Problems on Ch 6 and Ch 7	
4/28	T 8-1: 8.1 Adding and Subtracting Polynomials T 8-2: 8.2 Multiplying polynomials by monomials	8.1 pg. 468 #21-43o 8.2 pg. 475 #19-29o <i>Always write the original problem down!</i>	
4/30	T 8-2 8.2 Multiplying a Polynomial by a Monomial and solving 8.3 Multiplying Polynomials	8.2 pg. 474 #13-17o, 31-39o 8.3 pg 483 #1-11o – <i>double distribute</i>	
5/2	T8-2 8.3 Multiplying Polynomials	8.3 pg. 483 #13-31o	
5/6	T8-3 8.4 Special Products (FOIL)	8.4 Pg. 489 #23-47o	
5/8	Review/ART		
5/12	Ch 8 Part 1 Test	You must have 2 stamps to be eligible for retakes.	

Retake Problems for Ch. 7

T 7-1	Multiplication rules RETAKE WS
T 7-2	Division Rules RETAKE WS
T 7-3	All Rules RETAKE WS
T 7-4	Rational Exponents RETAKE WS

Target 8-1: I can write polynomials in standard form, name leading coefficient, name degree and perform addition and subtraction on polynomials.

Match the following terms to their vocabulary. Use your book if you need it!

1. Term	a. Number in front of a variable
2. Constant	b. A letter
3. Coefficient	c. a number that is by itself
4. Variable	d. Two or more terms that have the same variables/exponents or two terms that have no variables.
5. Exponent	e. A number, a variable or the product of a number and a variable.
6. Like terms	f. 1
7. Expression	g. Shows a mathematical relationship. The difference between this and an equation is that there is no solution to this.
8. Exponent if none shown is?	h. Raised to the power of

Compare your answers with your neighbor.

Vocabulary

_____	The product of a number and one or more variables with non negative integer exponents.
Examples	Non-examples
_____	The addition or subtraction of two monomials.
Examples	Non-examples
_____	The addition or subtraction of three monomials
Examples	Non-examples
_____	A monomial or sum/difference of monomials
Examples	Non-examples
_____	The sum of exponents of all its variables
Examples	Non-examples
_____	The degree of the TERM (monomial) with the GREATEST degree
Examples	Non-examples
_____	The polynomial is written from highest degree to lowest degree
Examples	Non-examples
_____	The number (coefficient) of the monomial of highest degree (When written in standard form it is the "leading" number)

You Try

$$12 + 5y + 6xy + 8xy^2$$

Degree: _____ Standard form: _____ Leading Coefficient: _____

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

Degree: _____ Standard form: _____ Leading Coefficient: _____

Rules for adding or subtracting polynomials (Combining Like Terms):

When _____ or _____ polynomials, the _____ or little number of each term does not change.

Adding or subtracting polynomials is also known as _____.

Let's remind ourselves of what like terms are.....

Try this on your own....circle the pairs of terms that are like terms.

$3x \text{ and } 2x$

$8x \text{ and } 7y$

$3xyz \text{ and } 5xyz$

$5x \text{ and } 2x^2$

$-5y^2 \text{ and } 9y^2$

$3x^3y \text{ and } -7xy^3$

$xy \text{ and } -xy$

$3 \text{ and } 4$

$y^2 \text{ and } y^3$

Summary: In your own words, explain what makes terms like terms and what makes terms not like terms.

Share your answers with a partner. Be prepared to share your answer with the group. Add your partner's information and the group's information to your summary.

In order to combine like terms, when _____ or _____ polynomials, only add or subtract the _____ (numbers that are in front of the variable) or the _____ (the numbers that do not have a variable). **You do not add or subtract the exponents.**

REPEAT: When adding and subtracting polynomials

_____!

Example

Simplify: $(7y^2 + 2y - 3) + (2 - 4y + 5y^2)$

Don't forget to distribute the negative when subtracting!

Example

Simplify: $(6y^2 + 8y^4 - 5y) - (9y^4 - 7y + 2y^2)$

You Try

1. $(6n^2 + 11n^3 + 2n) - (4n - 3 + 5n^2)$

2. $(3x^3 + 2x^2 - x^4) - (x^2 + 5x^3 - 2x^4)$

3. $(7n^2 + 12n^3 + 3n) + (4n - 3 + 5n^2)$

4. $(2x^3 + 4x^2 - x^4) + (x^2 + 5x^3 - 6x^4)$

T8-2 I can multiply polynomials using the distributive method.

Sometimes, the distributive property will be involved with combining like terms. When this happens, simply:

1. Copy the terms that are not subject to the distributive property.
2. Perform the distributive property.(exponents do change when multiplying)
3. Combine like terms.

Example

Simplify: $6y(4y^2 - 9y - 7)$

From chapter 7 we learned that when _____ like bases _____ the exponents.

Remember: all constants and variables have an exponent! If an exponent is not written, what is the exponent? _____

Examples

1. $3x(2x^2 + 3x + 5)$

2. $-3n^2(-2n^2 + 3n + 4)$

You Try

3. $-4b(1 - 9b - 2b^2)$

Examples

4. $3(2t^2 - 4t - 15) + 6t(5t + 2)$

5. $5(4y^2 + 5y - 2) + 2y(4y + 3)$

You Try

6. $4b(-5b - 3) - 2(b^2 - 7b - 4)$