Name_____

Date _____

Mr. Tallman

Lesson #50 - Combining Like Terms

If I have 2 pencils in one hand and three pencils in the other hand, how many pencils do I have?

If there are 8 apples in one basket and 12 apples in another basket, how many apples are there in all? _____

If there are 6 bananas in one basket and 3 mangos in another basket, can I combine them to make 9 banan-gos? ______. Why or why not? ______

In Math, we can only combine things that are "Like Terms".

Like Terms have the same variable and same exponent, but can have different coefficients. <u>Directions:</u> Identify the coefficient, base and exponent for the following terms.

	Coefficient	Base	Exponent
1) 5x ²			
2) -3y ⁶			
3) 10x			
4) -9			
5)			
6) 25r ⁴			

Directions: Circle the like terms.

6)	-6x,	7,	2x,	9x ² ,	3x
7)	2у,	2x,	6,	0,	2y ²
8)	19x,	7x ² ,	2у,	x ² ,	3x ²
9)	2у,	4x,	10,	у,	2y ²
10)	5x ³ y,	4x ³ ,	7у,	7ху,	-2x ³ y

Simplify the following expressions by combining like terms.

11) 8y + 4y	12) 3x + 8y + 4x	$13) -7a^2 - 16 + 10a^2$
14) $3y^2 - 4y^2$	15) 7rs – 5rs	16) $8r^5y^2 - 4r^5y^2$

17) James simplified the expression $4x^3 - 3x^2$ and said it equals $1x^2$. Is he right or wrong? Explain.

1) 18 - 13r + 5 + 7r	2) -2 + 11 + 15m + 13m	3) 4 - 17c + 8c
4) 6s + s	5) 14z + 10 - 6z - 12	6) b + 3b
7) -10 + 8d + 15d – 14	8) 18x - 17x	9) 10p - 6 - 2p
10) 7z + 16 + 14z	11) $2x^2 - 4 + 7x^2$	12) -5xy ³ + 16 – 9xy ³