

Name: _____

Date: _____

Unit 1

Lesson 1

UNIT 1-Polynomials

Do Now: Simplify

a) $2a + 5b - 4a + 3b$

b) $10x + 5y$

c) $3x^2 + x^2$

d) Distribute: $-(3x^2 + 2x - 6)$

e) Subtract $8y^2$ from $2y^2$

AIM: ADDING & SUBTRACTING POLYNOMIALS

For the expression, $3x^2$, identify the following

Numerical Coefficient _____ Base _____ Exponent _____ Variable _____

_____ : **ONE** term involving numbers and/or variables.

Ex: $3xy$,

_____ : **TWO** terms joined by addition or subtraction.

Ex: $3x^2 + 2y$

_____ : **THREE** terms joined by addition or subtraction.

Ex: $a + b - c$,

_____ : an expression that has more than one variable.

Ex: $8y^3 - y^2 + 3y - 1$

Standard Form: the terms are arranged so that the exponents _____ from left to right

Degree of a polynomial:

Put the following polynomials in standard form and state its degree:

1) $-4x^2 + 5x + 3x^3 - 9$

2) $4x - 9x^2 + 3$

Degree:

Degree:

ADDING POLYNOMIALS

RULE:

1) $(4x^2 - 3x + 2) + (5x - x^2 - 1)$

2) Find the measure of the perimeter of a triangle whose sides measure $3x + 5$, $2x + 9$, and $5x + y$.

SUBTRACTING POLYNOMIALS

3) $(3x^2 - x - 2) - (x^2 + 2x - 1)$

RULE:

4) $x - (3x - 4)$

5) Subtract $2x^2 + 5x - 3$ from $x^2 - 7x + 3$

Name: _____

EXIT CARD

Who's Right?

Ariel and Sebastian are doing this question for their homework.
Did either of them do it correctly? Explain why or why not.

Simplify the following and write your answer in standard form.

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

Ariel

$$\begin{aligned}(3x^4 - x^2 + 5x) + (-4x^2 + 3x - 2x^4) \\ 3x^4 - x^2 + 5x + 4x^2 + 3x - 2x^4 \\ -x^4 + 3x^2 + 8x\end{aligned}$$

Sebastian

$$\begin{aligned}(3x^4 - x^2 + 5x) + (-4x^2 + 3x - 2x^4) \\ 3x^4 - x^2 + 5x - 4x^2 + 3x - 2x^4 \\ -5x^2 + 8x + x^4\end{aligned}$$

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$$\begin{aligned}(3x^4 - x^2 + 5x) + (-4x^2 + 3x - 2x^4) \\ 3x^4 - x^2 + 5x - 4x^2 + 3x - 2x^4 \\ -5x^2 + 8x + x^4\end{aligned}$$