Name NOTES

Algebra II: Adding Polynomials

Essential Question:

What is a polynomial and how do I add polynomials.

Sub Questions:

1) What does polynomial mean?

   many terms

2) What is an expression with one term called?

   Monomial x or 3 or $3x$

3) What about two terms?

   binomial $x+6$

4) What about three terms?

   trinomial x^2+3x+6

How to add polynomials by combining like terms. (power point)

1) $(9y-7x+15a)+(-3y+8x-8a)$

$$\begin{array}{r} -3y+8x-8a \\ \hline 6y+x+7a \end{array}$$

$(3a^2+3ab-b^2)+(4ab+b^2)$

$$\begin{array}{r} 4ab+b^2 \\ \hline 3a^2+7ab \end{array}$$

3) $(4x^2-2xy+3y^2)+(-3x^2-xy+2y^2)$

CHALLENGE QUESTION!

$$\begin{array}{r} -3x^2-xy+2y^2 \\ \hline x^2-3xy+5y^2 \end{array}$$

Assignment

ID: 1

Name_____

Adding Polynomials

Date_____ Period____

Simplify each expression.

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

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

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

4) $(3 + 2n) + (n + 5)$

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

6) $(4b^4 - 3b) + (4b + 2b^4)$

7) $(3b^3 + 2) + (4b^3 + 4)$

8) $(v^4 - 1) + (3 + 5v^4)$

9) $(v^2 + 5) + (1 - 4v^2)$

10) $(3p^4 - p) + (4p + 4p^4)$

11) $(5n^4 + 5) + (2 + 5n^4)$

12) $(4m^3 + 1) + (1 + m^3)$

13) $(2x^3 + 5) + (2 - 4x^3)$

14) $(5x^4 + x) + (4x + 5x^4)$