

Learning Objectives.

- 1) Students will perform operations on polynomials.

Please watch the following videos from the internet.

- 1) <http://www.virtualnerd.com/algebra-2/polynomials/operations/simplifying-expressions/addition-example>
- 2) <http://www.virtualnerd.com/algebra-2/polynomials/operations/simplifying-expressions/subtraction-example>
- 3) <http://www.virtualnerd.com/algebra-2/polynomials/binomial-multiplication-distributive-property.php>
- 4) <http://www.virtualnerd.com/algebra-2/polynomials/trinomial-multiplication.php>

Please complete the following Problems.

- 1) $(2x^2 - 3x + 3) + (x^2 - 6x)$
- 2) $(x + 3)(3x + 4)$
- 3) $(x^4 - 3x^2 + 3) - (-2x^2 + 2x + 8)$
- 4) $(x^2 - 5x + 2)(x^2 + 4x - 3)$
- 5) $(2x^2 - x + 3)(3x + 4)$
- 6) $(3x^3 - 5x^2 + 3x + 3) - (x^2 + 2x + 3)$
- 7) The dimensions of a rectangular floor space are $x+3$ and $x+7$. Find a polynomial expression that expresses the area of the floor in terms of x .

Congrats. You have just completed Blizzard Bag #1