lulumath

Subtracting Polynomials

Video Notes

Subtracting Polynomials

Background Knowledge:
- Adding Polynomials
- Multiplying a Monomial by a Polynomial

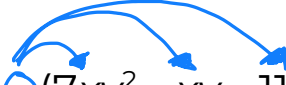Subtracting polynomials is like adding polynomials, with one extra, but **important** step:

make sure to distribute the negative (one)

Simplify:

Distributing the negative
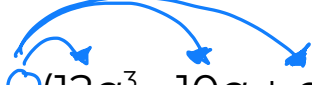
$(4x^2 + 5x - 2) - (3x^2 - 12x + 1)$

$4x^2 + 5x - 2 - 3x^2 + 12x - 1$ → The rest is just like adding polynomials: combine/collect like terms!

$x^2 + 17x - 3$

Simplify:

$(2x^2y + 9xy^2 - 5xy) - (7xy^2 - xy - 11x^2y)$

$2x^2y + 9xy^2 - 5xy - 7xy^2 + xy + 11x^2y$

$13x^2y + 2xy^2 - 4xy$

Simplify:

$(5a - 9a^3 + 3a^2) - (12a^3 - 10a + a^2) + (6 - 12a^2)$

$5a - 9a^3 + 3a^2 - 12a^3 + 10a - a^2 + 6 - 12a^2$

$-21a^3 - 10a^2 + 15a + 6$