

5.2 Polynomials

- 1) Add and subtract polynomials,
- 2) Multiply monomials.

Vocabulary terms:

- 1) polynomial: a monomial or sum of monomials,
- 2) terms: the monomials that make up a polynomial,
- 3) binomial: a polynomial with 2 terms,
- 4) trinomial: a polynomial with 3 terms,
- 5) degree: the degree of the monomial with the highest degree.

Degree of a Polynomial

Find the degree of:

1) $6x^3y^2 - 8xy^3$

2) $2a^3b^4c^5 - 8abc + 4a^4$

To simplify means to perform the indicated operation and combine like terms.

Simplify:

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

Multiply

1) $2x(7x^3 - 3x + 5)$

2) $3x^2(5x^4 - 8x^2 + 2)$

FOIL Method

FOIL Method is used to multiply 2 binomials.

1) $(3y + 2)(5y + 4)$

2) $(x + 2)(x - 8)$

Trinomial Multiplication

1) $(n^2 + 6n - 2)(n + 4)$

Homework

p. 231 #16-33, 37-50