

Writing Polynomials in Standard Form

Write the polynomial in standard form. Then give the degree and name it based on the number of terms

1. $y^2 + y^6 - 3y$

S.F.- $y^6 + y^2 - 3y$

Degree: 6

Name: trinomial

2. $16 - 4x^2 + x^5 + 9x^3$

S.F.- $x^5 + 9x^3 - 4x^2 + 16$

Degree: 5

Name: polynomial

3. $(18y^5 - 3y^8 + 14y^5)$

S.F.- $-3y^8 + 32y^5$

Degree: 8

Name: binomial

Adding Polynomials

1. $(3a^2 - 6a) + (7a^2 - 10a)$

$10a^2 - 16a$

2. $(10xy + x) + (-3xy + y)$

$7xy + x + y$

3. $(4m^2 + 5) + (m^2 - m + 6)$

$5m^2 - m + 11$

4. $(6x^2 + 4y) + (3x^2 + 3y - 8x^2 - 2y)$

$x^2 - 3y$

Subtracting Polynomials

**When subtracting, it is like distributing a negative sign!!!

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

$-x^3 + 4y$

2. $(9z^2 - 3z) - (z^2 - 5z)$

$8z^2 + 2z$

3. $(7m^4 - 2m^2) - (5m^4 - 5m^2 + 8)$

$2m^4 + 3m^2 - 8$

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

$x^2 - 4x$