

SI Worksheet 7

Polynomials

For each equation, identify the leading coefficient and the degree, and then graph it.

1) $y = 8x^4 - 4x^3 - 10x^2$

2) $y = x^5 - x - 2x^4 + 2$

3) $y = 3(2x + 1)(x - 4)^3(5x)(x - 1)^2$

4) $y = -x^2(3x - 7)$

Graphing Rational Functions

For each equation, identify all critical points, define all asymptotes, and then graph it.

1) $y = \frac{2x^2}{5x^2}$

2) $y = \frac{x+1}{x-1}$

3) $y = \frac{3(x+1)(x+2)(x-3)}{(x-1)^3}$