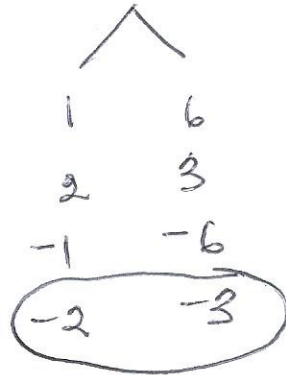


10/03/2018.

Enock Ofori
MATH 2311
Pre-Calculus I
Ms. Palmer

Factoring Quadratics.

$$f(x) = x^2 - 5x + 6$$



$$f(x) = (x-2)(x-3).$$

$$f(x) = x^3 - 4x^2 - 9x + 36.$$

$$x^2(x-4) - 9(x-4).$$

$$f(x) = (x^2 - 9)(x-4).$$

$$f(x) = (x-3)(x+3)(x-4).$$

Special Cases:

diff of squares

$$a^2 - b^2 = (a-b)(a+b).$$

$$a^3 - b^3 = (a-b)(a^2 + ab + b^2).$$

$$a^3 + b^3 = (a+b)(a^2 - ab + b^2).$$

diff of cubes

Sum of cubes

$$f(x) = 3x^3 - 6x^2 + 3x.$$

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

$$= 3x(x-1)(x-1).$$

$$= 3x(x-1)^2.$$