I can add and subtract polynomials.

Level 1- Beginning

Simplify Each Expression

(x+4)+(x+5)	(x+6)-(x+7)	(x-8)+(2x+10)	(x - 4)-(3x -5)

Level 2- Developing

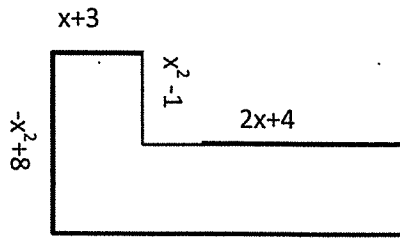| $(2x^2 + 6) + (6x^2 + 6)$	$(8x^3 + 9x^2 - 6) + (10x^3 + x^2 - 21)$	$(-4x^4 + 9x^3 + 6x) - (7x^4 + 4x^3 - 11x)$

Level 3- Proficient

$(4 - 7x^2 + 9x^4 - 7x) + (2x - 12 + 8x^2)$	$(-9x^2 - 4x + 2) - (8x^3 + 8x - 3 + 15x^2)$
$(3 - 7x^3 + 8x^4 - 13x) - (4 - 9x^2 + 4x^4 - 12x)$	$(-3x^3 + x^2 - x) + (5 - 2x^2 + 6x^3 - 4x)$

Level 4- Mastery

Find the Perimeter	The side length of a square is $3x^2 + x$. Find the perimeter.	The length of a rectangle is $(4x^2 - x^3 + 5)$ and the width is $(7x^3 - x^2)$. Find the perimeter.
$x+3$ x^2-1 $2x+4$ $-x^2+8$		

I can multiply polynomials.

Level 1- Beginning   Level 2 -Developing

$2x(6x^2 + 9x + 2)$	$5x^3(x^2 - 3x + 8)$	$-x^6(3x - 4)$	$x^2y^3(2xy^2 - 8y^2)$

Level 3- Proficient

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

$(3x + 4)(3x^2 + 2x + 5)$	$(-2x^3 + 8)(2x^2 - 4x + 1)$

Level 4- Mastery

Mrs. Lutsic is building an ice skating rink in her backyard. The length of the of the rectangle is $2x^3 + 8x + 2$ and the width of the rectangle is $3x^2 - 9$.
Determine the expression to represent the area of the ice rink.

If x=2 feet, what is the area?

Hadeel is building a square shaped pen to keep her new mini horses. The sides of the pen are represented by 2x2-5.
Determine an expression to represent the area of the pen.

If x=3 feet, what is the area?