Elementary Algebra Brush-Up Session: POLYNOMIALS

If you placed into MATH 95 or a higher-level course, this might be useful for you

1. Combine like terms, write in standard form, state the degree, and evaluate for x = -2.

a.
$$6x^2 + 2x^4 - 2x^2 - x^4 - 4x^2 + x$$

b.
$$12x^6 - x^3 + 8x^6 + 4x^3 - x^7 - 3x^3$$

2. Add, collect like-terms, and write in standard form.

a.
$$(x^2 - 5x + 4) + (8x - 9)$$

b.
$$(4x^5 - 6x^3 - 9x + 1) + (3x^4 + 6x^3 + 9x^2 + x)$$

3. Subtract, collect like-terms, and write in standard form.

a.
$$(x^2 - 3x - 2) - (2x^2 - 6x - 2)$$

b.
$$(2x^3 - 5x^2 + x + 7) - (5x^3 - 4x^2 + 2x + 1)$$

4. Multiply, c	ollect any	like terms,	and v	vrite in	standard	form.	Use FO	OIL fo	r the	product	of
two Binomial	S										

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

b.
$$(x + 7)(x + 3)$$

c.
$$(x-5)(x+3)$$

d.
$$(2x-3)(x-2)$$

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

5. Multiply the polynomials and write in standard form.

a.
$$(x-5)(x^2-6)$$

b.
$$(2x-1)^2$$