January 30, 2018

Warm Up

At your table, come up with as many differences between th two boxes as you can

8

$\sqrt{20}x^2 - 9x + 3$

$\frac{1}{2}x^5 - x^3 - 9x$

$x^3 + 4x^2 - 7x + 0.5$

$97x^{41} - 24x^2$

$7x^2 - 4x + \pi$

$4x^2y^2 + 6xy^2 + 8x^2y - 10$

$3^x + 2x^2 - x$

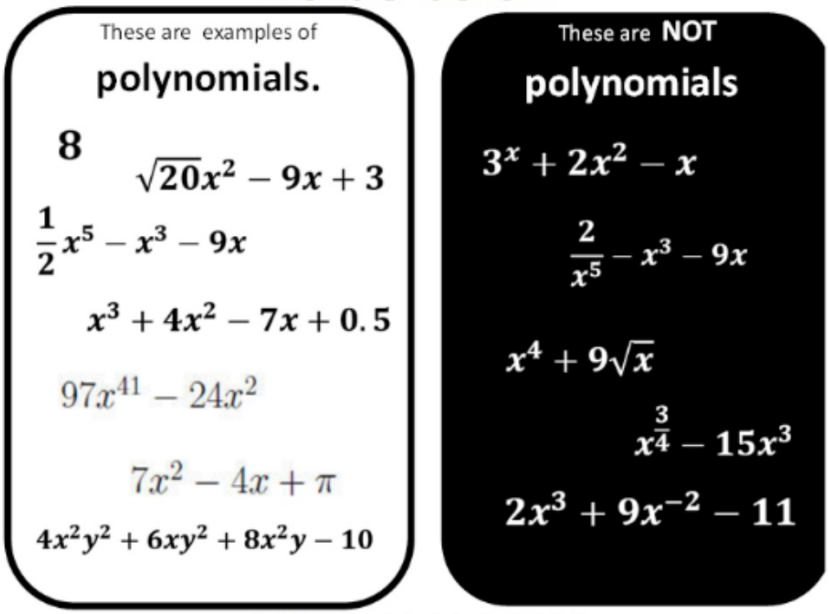
$\frac{2}{x^5} - x^3 - 9x$

$x^4 + 9\sqrt{x}$

$x^{\frac{3}{4}} - 15x^3$

$2x^3 + 9x^{-2} - 11$

Take 5 minutes to discuss again, using the "mathy" words below



WORD BANK

•variable •exponent •term •numerator •denominator •radical •Integer •whole number •negative •positive •expression •coefficient

Definitions of some words we will be using this unit

- Constant
- Monomial
- Coefficient
- Degree of a variable in a monomial
- Degree of a monomial
- Polynomial

Definitions cont.

- Binomial
- Trinomial
- Degree of a polynomial
- Standard form of a polynomial

Addition and subtraction of polynomials:

Simply add or subtract like terms. Ex:

$$(12x^3 – 5x^2 – 70x + 1) +(-17x^3+56x)$$

Multiplying or dividing be comes a little trickier. Today we'll just look at multiplication and we'll talk about division tomorrow

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

Example 2:

$$(3x+2y)^3$$

Now you try:

Multiply each of the following polynomials

$$(2x+6)(7x-8)$$

$$(x^2+1)(x-7)$$

$$(x^3+3x+1)(x-6)$$

$$(2x^2-3x+4)(7x^2+8x-2)$$