

## Adding and subtracting polynomials 1.27.17

Warm-up:

Place the following in descending order and name the degree

$$5x^4 - 3x^5 + 2x^6 - 6x^3 + x + 5x + 9x^2 + 13$$

Find the degree of the following equation

$$11r^2t^4 - 2s^4t^5 + 24$$

Go over hw

Simplify the following expressions

$$(3x^2 - 4x + 8) + (2x - 7x^2 - 5)$$

We need to group the terms together. We can only put together terms with the same variable exponent combination so  $x^3y^2z$  can only put together with other  $x^3y^2z$  or a combination of that.

So we can  $(3x^2 - 7x^2) + (-4x + 2x) + (8 - 5)$  Which equals  $-4x^2 - 2x + 3$

Simplify the following

$(3n^2 + 13n^3 + 5n) - (7n + 4n^3)$  again we can only combine terms so we can turn this into one expression by distributing the negative sign so we get

$$(3n^2 + 13n^3 + 5n) - 7n - 4n^3$$

$$3n^2 + (13n^3 - 4n^3) + (5n - 7n) = 3n^2 + 9n^3 - 2n = 9n^3 + 3n^2 - 2n$$

You try: Maybe on whiteboards if time allows.

$$(6n^2 - 4) + (-2n^2 + 9)$$

$$(9z - 3z^2) + (4z - 7z^2)$$

$$(3 + a^2 + 2a) + (a^2 - 8a + 5)$$

$$(11 + 4d^2) - (3 - 6d^2)$$

$$(4g^3 - 5g) - (2g^3 + 4g)$$

$$(-4y^3 - y + 10) - (4y^3 + 3y^2 - 7)$$

PG 441 #15-17, 21-23, 27, 28, 34