

## Today's Plan:

**Learning Target (standard):** I will classify polynomials based on their degree and number of terms. I will combine like terms and put polynomials in descending order.

**Students will:** Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

**Teacher will:** Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

**Assessment:** Board work, homework check and homework assignment

**Differentiation:** Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

Have homework out on your desk and please pick up your chromebook that matches your board number. You will be completing the "Operations on Polynomials" (Pre-Test).

\* This is for a completion grade and will be found in your Google Classroom. \*

NAME \_\_\_\_\_

#86

$$y = mx + b$$

$$7 = -2(1) + b$$

$$7 = -2 + b$$

**BELL RINGER**

$$b = 9$$

1.) Write an equation of the line that passes through the point (1, 7) and has a slope of -2.

$$y = -2x + 9$$

2.) Evaluate  $x^2 + 11x + 28$  when  $x = -2$ .

$$(-2)^2 + 11(-2) + 28$$

$$-18 + 28$$

$$4 - 22 + 28$$

$$10$$

3.) Solve  $x^2 = 49$ 

$$x = 7, -7$$

Simplify.

$$9) (4k^4 - 7k^3 - k - 3k^2) - (5 + 4k^4 - k^3) - (6k^4 + 5k^3 + 1)$$

$$\underline{4k^4} - \underline{7k^3} - \underline{k} - \underline{3k^2} - \underline{5} - \underline{4k^4} + \underline{k^3} - \underline{6k^4} - \underline{5k^3} - \underline{1}$$

$$-6k^4 - 11k^3 - 3k^2 - k - 6$$

name: quartic polynomial

## Naming Polynomials:

degree: 3, 2 terms

Name: **cubic binomial**

degree: 5, 3 terms

Name: **quintic trinomial**

degree: 7, 6 terms

Name: **7th degree polynomial**

State the degree of the polynomial. Name it.

$$3x^{\textcircled{3}} - 4x^2 + 2x - 1$$

degree: **3**

name: **cubic polynomial**

$$2m^4 + 4m^3 - m + 7m^{\textcircled{6}}$$

degree: **6**

name: **6th degree polynomial**

$$4r^2s^3 - 3rs^2 + 5r^4s^6$$

$$\begin{array}{c} 2+3 \\ \textcircled{5} \end{array}$$

$$\begin{array}{c} 1+2 \\ \textcircled{3} \end{array}$$

$$\begin{array}{c} 4+6 \\ \textcircled{10} \end{array}$$

degree: **10**

name: **10th degree trinomial**

Simplify.

$$\underline{3x^2} - \underline{2x} - \underline{2x^2} - \underline{4x}$$
$$x^2 - 6x$$

degree: 2

name: quadratic binomial

Simplify.

$$3(5x^2 - 4x - 7) - 2(x^2 - 2x + 3)$$
$$\underline{15x^2} - \underline{12x} - \underline{21} - \underline{2x^2} + \underline{4x} - \underline{6}$$
$$13x^2 - 8x - 27$$

degree: 2

name: quadratic trinomial

Simplify.

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

$$\underline{-2x^2} + \underline{6x} - \underline{8} + \underline{6x^2} - \underline{6x} - \underline{9}$$

$$4x^2 - 17$$

degree: 2

name: quadratic binomial

State the degree of the monomial. Name it.

$$-6x^4y^5z^1$$

degree:  $4+5+1=10$

name: 10th degree monomial

$$2m^3n^4p^5r^9$$

degree:  $3+4+5+9=21$

name: 21st degree monomial

$$-4x^3yz^1$$

degree:  $3+1+1=5$

name: quintic monomial

# Assignment:

## Combining Like Terms Practice

#1-10