

MasteryConnect/bubblesheet.com

Student ID:

Test ID: 736404

Starter:

1. I turn all of my work into \_\_\_\_\_
2. Did I get onto Mrs. Ward's Weebly site? \_\_\_\_\_
3. Did my parents sign the online disclosure? \_\_\_\_\_

## Calendar math September

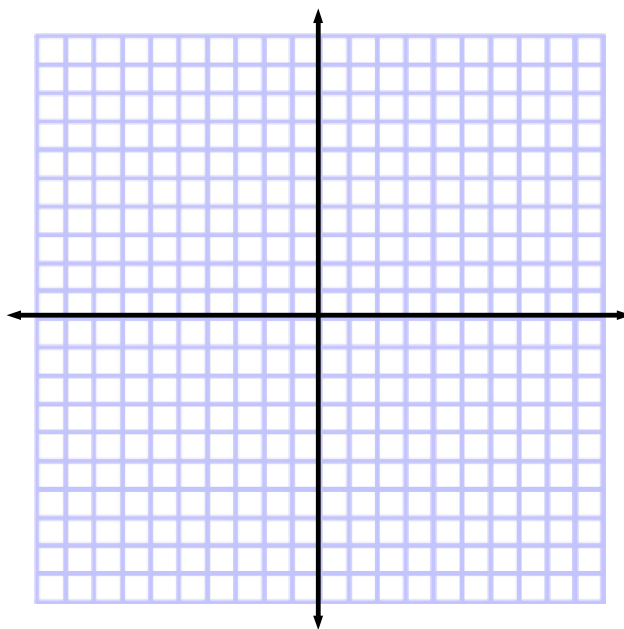
### Transformations

Parent Functions: the basic function that is used to create more complex functions

Linear  $f(x) = x$   $y = x$

Quadratic  $f(x) = x^2$   $y = x^2$

Absolute Value  $f(x) = |x|$   
or  $y = |x|$



## 1.1 Polynomial Operations

## Polynomials

Standard Form:  $ax^n + bx + c$

Coefficient: The number IN FRONT of the variable

Always put polynomial in order from highest exponent to constant

leading coefficient: ALWAYS "a"

constant: ALWAYS the loner "c"

degree: the highest exponent

$$4x^3 + 7x - 5x^6 + 2$$

SF:  $-5x^6 + 4x^3 + 7x + 2$

Degree: 6  
Constant: 2  
LC: -5

Put it in order then tell me

Polynomial: Yes/No

SF: (standard form)

Degree:

LC: (leading coefficient)

Constant

1.  $-3 - 2x^6 - 10x^2$

→ SF: <sup>Yes</sup>  $-2x^6 - 10x^2 - 3$   
→ Degree: 6  
→ LC: -2  
→ Constant: -3

5.  $-4r - 3r^2 + 9r - 6^{1/4}$

Add and Subtract Polynomials are like fractions. What is the rule for + - fractions?

$$6. (-13x^4 + 5) - (-10 + 8x^4 + 3x^2)$$

$$\begin{array}{r} -13x^4 + \textcircled{5} + \textcircled{10} - 8x^4 - 3x^2 \\ \hline -21x^4 - 3x^2 + 15 \end{array}$$

$$9. \textcircled{1} (2x^4 + 5) - (2x - 4x^2 + 1) - (5x + 3)$$

$$\begin{array}{r} \textcircled{2} \cancel{2x^4} + 5 - 2x + 4x^2 - 1 - 5x - 3 \\ \hline \textcircled{3} 2x^4 + 4x^2 - 7x + 1 \end{array}$$

11. Find the sum of  $(4x^2 + 2x + 1) + (?) = (7x^2 + 5x + 4)$

$$\begin{array}{r} 7x^2 + 5x + 4 \\ -4x^2 - 2x - 1 \\ \hline 3x^2 + 3x + 3 \end{array}$$

15.  $5r^2(5r - 8) = 25r^3 - 40r^2$

$$\begin{array}{l} (6r - 5)^2 \\ (6r - 5)(6r - 5) \end{array}$$



$$21. f(n) = n^3 + 4$$

$$g(n) = 2n + 3$$

Find  $f(n) \cdot g(n)$

$$(n^3 + 4)(2n + 3)$$

$$2n^4 + 3n^3 + 8n + 12$$

Review: Find the GCF

$$25. 24; 36$$

$$24 = 1, 2, 3, 4, 6, 8, 12, 24$$

$$36 = 1, 2, 3, 4, 6, 9, 12, 18, 36$$

$$12$$