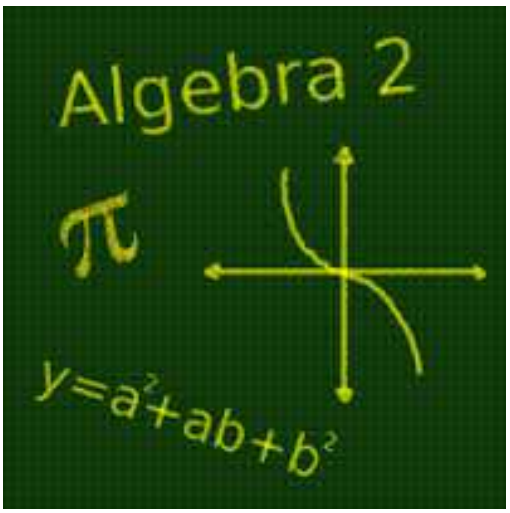
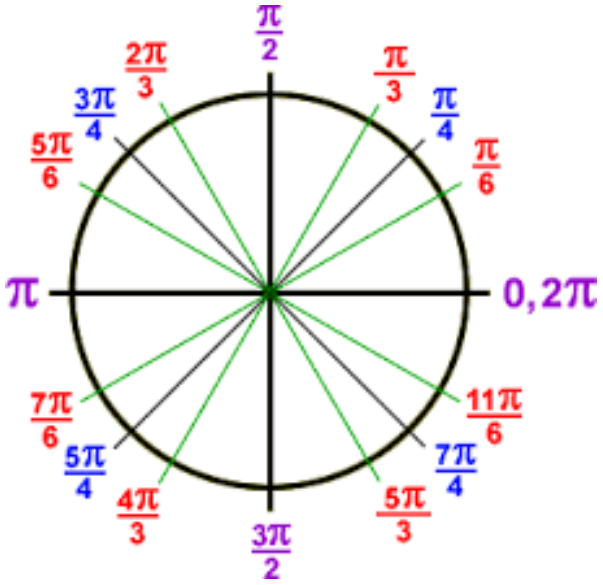
Welcome to Mrs. Allender's

Algebra II/ Trig Class!





*Please complete the growth measure by answering the questions on the answer sheet.

*When finished please continue to fill out the about me page.

*Textbooks

Who is your teacher?

Syllabus Scavenger Hunt

1) What is Mrs. Allender's cell phone policy?

2) How much are tests worth?

3) List at least three required supplies.

4) If you are having trouble, when can you get help from Mrs. Allender?

5) Can you retake assessments? If so, explain the process.

6) List at least three of Mrs. Allender's expectations.

7) If you are absent, where can you find the work you missed?

Now that you know my expectations....

What do you expect from me?

EXPECTATION...	
REALITY...	

Interviews and Handshakes

- 1 minute to come up with questions

-Youngest person goes first (stand up)

-The other members will ask questions for 1 minute

-Take turns

Algebra II/Trig Breakdown

- Chapter 2- 1st Degree Polynomials Linear Equations and Functions
- Chapter 4- 2nd Degree Polynomials Linear Equations and Functions
- Chapter 5- Higher Order Polynomial Functions
- Chapter 3- Systems and Matrices

FUNCTIONS

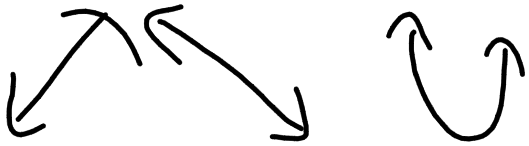
DOMAIN: Input values (x values)

RANGE: Output values (y values)

INTERCEPTS: Where graph crosses the x or y axis (#, 0) (0, #)

SOLUTIONS: The values of x that make the statement or equation "TRUE"

END BEHAVIOR: What is happening to the ends of the graph.

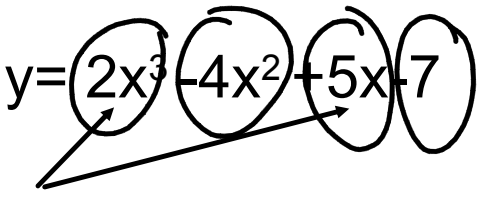


POLYNOMIALS

POLYNOMIALS are sums/differences of variables and exponent expressions.

Each piece of a polynomial is a TERM

POLYNOMIAL TERMS have variables which are raised to whole number exponents



POLYNOMIALS

RULES FOR POLYNOMIALS...

1) No square roots of variables

$\sqrt{x}$

$2x^3+3x$ ✓

2) No fractional powers

$x^{1/4}$

✓ $\sqrt{2x+3x^2}$

✗ $\sqrt{x+3}$

3) No variables in any denominator

$\frac{1}{x}$

4) No negative numbers as exponents

x^{-6}

POLYNOMIALS

DESCRIBING POLYNOMIALS

EXAMPLE: $y = 2x^3 - 4x^2 + 5x - 7$

Written in **DECREASING** order of exponents

LEADING TERM is the highest exponent

DEGREE of the leading term is degree of polynomial

CONSTANT is the term with no variable

COEFFICIENT is number before variable

EXAMPLES

POLYNOMIAL

$x^4 - x^3 + x^2 - x + 1$

$56x^{23}$ $5x - 7$

-4x

2x+1

$\frac{X+2}{3}$

$5x^{12} - 2x^6 + x^5 - 198x + 1$

NOT A POLYNOMIAL

$\sqrt[3]{x}$

$5x^{1/2}$

$\frac{x+2}{x}$

x^{-2}

EXAMPLES

1) $y=3x^4+3x^3+7x^5+x-8$

$7x^5+3x^4+3x^3+x-8$

$7x^5$

5

-8

4

A) Is this polynomial written correctly? Yes

B) What is the leading term? $2x^3$

C)What is the degree? 3

D) Is there a constant? If so, what is it? 9

E) How many coefficients are there?

2) $y=2x^3+8x^2+9$

Foundations ws

Homework

*Finish Summer HW Packet
*Read over syllabus with a parent or guardian and have them sign it.

(worth a homework grade)
*Finish Foundations WS

*Page 341 #3-8 Page 76 #5-23 odd, 35, 38, 39, 45, 46

If you did not finish the summer homework, please do so!