



Fort Osage

High School

ALGEBRA 2

Mrs. Kassie Gravely

Site:

<https://sites.google.com/fortosage.net/ms-gravely/home>

Email: kgravely@fortosage.net

Phone: (816) 650-7047

Office Hours: 5th hour

Tutoring: Daily until 3:45

Course Description

This is an advanced course studying linear functions, inequalities, absolute value functions, systems of equations and inequalities, quadratic functions, higher order polynomial functions, rational functions, radical functions, exponential functions, and variations.

PREREQUISITE: SUCCESSFUL COMPLETION OF ALGEBRA 1 AND GEOMETRY

I CAN...

- Use properties of rational and irrational numbers
- Interpret and write expressions in equivalent forms to solve problems
- Create equations that describe numbers or relationships
- Solve equations and inequalities in one variable
- Understand the concept of a function, use function notation, and interpret functions in terms of the context
- Analyze functions using different representations
- Build new functions from existing functions
- Summarize, represent, and interpret data on two categorical and quantitative variables
- Solve systems of equations
- Represent and solve equations and inequalities graphically
- Use complex numbers in polynomial identities and equations
- Perform arithmetic operations on polynomials
- Understand the relationship between zeroes and factors of polynomials
- Use polynomial identities to solve problems
- Rewrite rational expressions
- Extend the properties of exponents to rational exponents
- Interpret and write expressions in equivalent forms to solve problems
- Understand solving equations as a process of reasoning and explain the reasoning
- Construct and compare linear, quadratic, and exponential models and solve problems
- Summarize, represent, and interpret data on a single count or measurement variable
- Understand independence and conditional probability and use them to interpret data
- Use the rules of probability to compute probabilities of compound events in a uniform probability model
- Define trigonometric ratios and solve problems involving right triangles
- Apply trigonometry to general triangles

Required Materials

In order to be successful in this class students should utilize:

District Issued Chromebook

- Access to Google Classroom
- Access to [MyMathLab](#) (online homework platform)

Learning Documents: paper copy provided and also posted in Google Classroom

Other needed items: writing utensils, scratch paper or a notebook

Behavior & Learning Expectations

- Be present
 - Students should be in class when they're in class – no phones or other distractions
 - Students should use their **passing time** to use the restroom or get a drink. Only one student may use the Restroom at a time and must sign in and out
 - Students are expected to come to class prepared (with all required materials)
- Be responsible, respectful, patient, disciplined, and work hard
 - Students are expected to listen respectfully to Mrs. Gravely and to others who have been asked to share their thinking
 - Students are expected to ask questions to promote their own and others' understanding
 - Students are expected to be contributing members when in a group
 - Students are expected to follow all school rules

Grading/Homework Policy

Students will receive a grade based on an accumulation of points from the following categories:

Grading Categories:

Homework (10%)
Quick Checks
Unit Assessments (90%)

Grading Scale:

A 90%-100%
B 80%-89%
C 70%-79%
D 60%-69%
F Below 60%

Homework: Assignments will be posted as Practice Sets in Google Classroom. Each set is worth 10 points and is weighted as 10% of a students' grade.

Quick Checks: Students will be given QuickChecks throughout a unit to formatively assess progress toward learning targets. These will provide information to both the student and teacher about student progress, but will not count toward their class grade.

Assessments/DCA's: Assessments will be given at the end of each unit. These assessments will determine the other 90% of their grade.

There will be NO Extra credit.