

# Algebra I - Course Information/Syllabus

# Welcome to My Class Teacher: Mrs. J. Salas (Rm 234)

Conference: 3<sup>rd</sup> Block

School Phone

School Email: Contact through school website

#### Course Description:

This course includes the introduction of variables, constants, expressions, equations and functions. Also, the language of numbers will be examined. The topics covered will be solving equations, simplifying expressions, understanding order of operations, and performing operations with positive and negative numbers. Also, exploring polynomials, factoring, graphing (linear and quadratic functions), simplifying radicals and expanding arithmetic knowledge.

### Course Objective:

Students will acquire and demonstrate knowledge of concepts, definitions, properties and applications of several topics as well as develop the computational skills and strategies needed to solve problems. Students will develop critical thinking and decision making skills by connecting concepts/topics to practical applications.

I will provide you the opportunity to be successful, but you must do your part.

# Academic Expectations

- 1. Come to class prepared with all materials including assignments, binder, pencil and paper.
- 2. Come to class on time and be ready to participate appropriately and as soon as class begins.
- 3. Use academic language to demonstrate comprehension and conduct mathematical discourse.

# Behavioral Expectations

- 1. Respect yourself, others and property.
- 2. Follow directions the first time they are given and remain on task until dismissed by the teacher.
- 3. Comply with all district and school rules/policies.

# Supply List

You should have the following items for class every day:

- 3-ring binder (1 inch)
- · Paper Loose leaf & graph
- Pencil, eraser, highlighter
- TI Inspire CX Graphing Calculator

# Grading Procedure\*

### Minor Assignments (40%)

Daily Classwork/Homework/Quiz

Work will be assigned daily. Homework/classwork is practice and needs to be completed when assigned so you can be successful. Assignment due dates will be announced when assigned. No late homework will be accepted (unless you were absent).

### Major Assignments (60%)

Exam/Project/Presentation

There will be a minimum of 3 major assessments per grading period.

# Make-up Policy\*

If you are absent on the day of a guiz or test, you will be expected to schedule a time with the teacher to take the quiz/test. If you are absent the day of a homework/classwork assignment, it is your responsibility to make-up the assignment within one day.

\*See district grading procedures and policy for specifications

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### Retests

You are expected to pass any given test the first time. If it is necessary, a retest will be given if you meet the following criteria:

- (1) Attend tutoring after being advised of the failing test grade,
- (2) Complete a review assignment prior to the retest.

Retests will be scheduled after school within one week of receiving the test grade. The highest grade on any retest is 70. \*RETESTING FOR PAP IF ONLY 50% FAIL AN FXAM.\*

# Tutoring Schedule

By appointment

(schedule with teacher)

### Remind

Remind is a service that provides a safe way for teachers to text message students and parents without needing to know their phone number and without having to give their phone number out. Sharyland ISD has automatically synced students and parents/guardians to a class Remind using Skyward information. If needed, you may join the class remind by texting the following code to the number 81010:

1<sup>st</sup> Block class code: @ 2<sup>nd</sup> Block class code: @

# Attendance/Exemptions

Attendance is very important. It is important to be in class so as not to miss a lesson/assignment/quiz/test. Also, Semester Exam Exemptions will depend on attendance and grades to determine eligibility. Please refer to the district's High School Semester Exam Exemption policy for specifications.

### DPA's, TEKS, STAAR

As per Sharyland ISD, DPA's (Data Point Assessments) will be administered throughout the term. The purpose of the DPA's is to prepare students for the STAAR (EOC) Exam. The <u>EOC counts towards graduation</u> and the DPA's hold a significant importance in the Algebra I Curriculum. The curriculum is aligned with the Texas Essential Knowledge & Skills (TEKS) and has been adjusted to meet the needs of the Algebra I End-of-Course Exam. To further prepare students for the EOC, students will occasionally be testing online using the Pearson (textbook publisher) website. The purpose for testing via an online resource is to better prepare our students for online testing which is how we EOC test our students here at Pioneer High School.

### Miscellaneous

- · Check Skyward often for most current grades and averages.
- $\boldsymbol{\cdot}$  Expect to  $\underline{\text{remain}}$  in class until dismissed by the teacher.



I look forward to us having a positive learning environment.

Thank you for your help and cooperation! ...Mrs. J. Salas

#### PLEASE STON AND KEEP TH BINDER:

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I understand and accept the responsibility for completing the coursework and following all class expectations.	
Student signatureDate	
As a parent/quardian. Tunderstand and accept responsibility to help this student fulfill the obligation of this	

As a parent/guardian, I understand and accept responsibility to help this student fulfill the obligation of this course.

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# This Course In A Nutshell



#### Topic 1 - Solving Equations & Inequalities

- 1-1 Solving Multi-Step Equations
- 1-2 Solving Equations with Variables on Both Sides
- 1-3 Literal Equations
- 1-4 Solving Proportions
- 1-5 Proportions & Similar Figures
- 1-6 Solving Multi-Step Inequalities
- 1-7 Compound Inequalities

### Topic 2 - An Introduction to Functions

- 2-1 Using Graphs to Relate Two Quantities
- 2-2 Patterns & Linear Functions
- 2-3 Patterns & Nonlinear Functions
- 2-4 Graphing a Function Rule
- 2-5 Writing a Function Rule
- 2-6 Formalizing Relations & Functions
- 2-7 Using Function Notation

#### Topic 3 - Linear Functions

- 3-1 Rate of Change & Slope
- 3-2 Direct Variation
- 3-3 Slope-Intercept Form
- 3-4 Point-Slope Form
- 3-5 Standard Form
- 3-6 Parallel & Perpendicular Lines
- 3-7 Transformations of Linear Functions
- 3-8 Scatter Plots & Trend Lines

#### Topic 4 - Systems of Equations & Inequalities

- 4-1 Solving Systems by Graphing
- 4-2 Solving Systems Using Substitution
- 4-3 Solving Systems Using Elimination
- 4-4 Applications of Linear Systems
- 4-5 Linear Inequalities
- 4-6 Systems of Linear Inequalities

#### Topic 5 - Exponents & Radicals

- 5-1 Zero & Negative Exponents
- 5-2 Multiplying Powers with the Same Base
- 5-3 More Multiplication Properties of Exponents
- 5-4 Division Properties of Exponents
- 5-5 Rational Exponents & Radicals
- 5-6 Simplifying Radicals
- 5-7 The Pythagorean Theorem

### Topic 6 - Sequences

- 6-1 Arithmetic & Geometric Sequences
- 6-2 Arithmetic Sequences in Recursive Form
- 6-3 Geometric Sequences in Recursive Form

### Topic 7 - Polynomials & Factoring

- 7-1 Adding & Subtracting Polynomials
- 7-2 Multiplying & Factoring
- 7-3 Multiplying Binomials
- 7-4 Multiplying Special Cases
- 7-5 Factoring  $x^2 + bx + c$
- 7-6 Factoring  $ax^2 + bx + c$
- 7-7 Factoring Special Cases
- 7-8 Factoring by Grouping
- 7-9 Simplifying Rational Expressions
- 7-10 Dividing Polynomials

#### Topic 8 - Quadratic Functions & Equations

- 8-1 Quadratic Graphs & Their Properties
- 8-2 Quadratic Functions
- 8-3 Transformations of Quadratic Functions
- 8-4 Vertex Form of a Quadratic Function
- 8-5 Solving Quadratic Equations
- 8-6 Factoring to Solve Quadratic Equations
- 8-7 Writing Quadratic Functions
- 8-8 Completing the Square
- 8-9 The Quadratic Formula & the Discriminant

#### Topic 9 - Exponential Functions & Equations

- 9-1 Exponential Functions
- 9-2 Exponential Growth & Decay
- 9-3 Modeling Exponential Data