



Chandler Unified School District

MAT100 Algebra 1

Semester 2, SY 2022-23

Course Overview

Course Description

MAT100 Algebra 1 (Full Year, 1 Credit): This course is the first year of a standards-based mathematics curriculum. Number sense topics include the understanding and application of numbers, representing numbers, and the relationships among numbers and different number systems. Data analysis focuses on understanding and applying data collection, organization, and representation to analyze and sort data. Algebra topics use algebraic representations to represent and analyze mathematical situations and structures. Geometric topics include specifying and describing spatial relationships using coordinate geometry and other representational systems. Structure and logic focus on algorithms and algorithmic thinking and using reasoning to solve mathematical problems in contextual situations.

Advanced Placement (AP) / International Baccalaureate (IB) / Dual Enrollment

This not an AP, IB, or Dual Enrollment course. An additional syllabus is not required for this course.

Site

School name and address:

Perry High School, 1919 E Queen Creek Rd, Gilbert, AZ 85297

Building principal:

Heather Patterson
patterson.heather@cusd80.com

Faculty Information

Teacher:

Myrna Hahn BS Construction Engineering and Teacher and Teacher Education MEd
hahn.myrna@cusd80.com
F112 ext 2912

Office hours: By Request

Course Learning Outcomes

After this course, students will be able to:

Semester 1:

- 1) To solve real-world problems using linear equations, linear functions, linear inequalities, function notation, slopes, and y-intercepts.
- 2) To solve multistep linear equations and inequalities, including those with variables on both sides and those with infinitely many solutions and no real solutions.
- 3) To solve absolute value equations involving one or two absolute values, and identify

equations with extraneous solutions.

- 4) To rewrite and use literal equations and common formulas.
- 5) To write linear equations and identify linear functions from tables, graphs, and contextual situations.
- 6) To solve multi-step, compound, and absolute value inequalities.
- 7) To use function notation to evaluate, interpret, and graph functions.
- 8) To find the slope of a line and use it to write an equation in slope-intercept form.
- 9) To transform graphs of linear and absolute functions and combine transformations of graphs of these functions.
- 10) To identify, write, and use linear equations in slope-intercept form and point-slope form, including equations of parallel and perpendicular lines.
- 11) To interpret scatter plots, determine how well a linear model fits the data, and distinguish between correlation and causation.
- 12) To evaluate, graph, and write piecewise functions, including step and absolute value functions.
- 13) To use systems of linear equations and inequalities to model and solve real-world problems.
- 14) To solve systems of linear equations by graphing, by substitution, and by elimination, including interpreting systems that have no solution or infinitely many solutions.
- 15) To graph and write systems of linear inequalities and interpret solutions of the graphs.
- 16) To use statistics and probability to model the world around us.
- 17) To compare measures of center of a data set and identify the effects of transformations on data.
- 18) To interpret the range, standard deviation, and five-number summary of a data set and identify the effects of transformations on the data.
- 19) To make and use two-way tables to recognize associations in data by finding marginal, relative, and conditional relative frequencies.
- 20) To describe the shapes of data distributions and use them to choose appropriate measures and models of the data, and compare data distributions.
- 21) To classify data as qualitative or quantitative, choose and create appropriate data displays, and analyze misleading graphs.

Semester 2:

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- 1) To evaluate and simplify expressions with exponents, including rational exponents, and to find n th roots.
 - 2) To solve exponential equations algebraically and by graphing.
 - 3) To identify, evaluate, and graph exponential functions (growth and decay) and solve real-life problems using exponential functions.
 - 4) To identify, extend, write, and graph geometric and arithmetic sequences.
 - 5) To classify, add and subtract polynomial expressions.
 - 6) To multiply polynomial expressions, including by using special patterns.
 - 7) To factor polynomial expressions, including quadratic expressions, by using various methods and patterns.
 - 8) To solve polynomial equations by factoring the GCF and using the Zero-Product property.
 - 9) To solve quadratic equations by graphing, factoring, using square roots, completing the square, and using the quadratic formula.
 - 10) To graph quadratic functions and identify transformations of graphs of quadratic functions.
 - 11) To interpret graphs of quadratic functions.
 - 12) To re-write polynomial expressions in equivalent forms.

Materials and Fees

Course Materials

Composition Notebook or Binder

Pencils

Scientific Calculator or Ti-84 Graphing Calculator

Course Fees

n/a

Curriculum and Instructional Resources

Adopted Resource(s)

Algebra 1 - Big Ideas, Larson & Boswell (Cengage)

**An asterisk will indicate a resource containing sexually explicit materials per legislative definitions.*

CUSD has determined that all resources listed above are of exceptional educational value.

Course Access

This course is taught in person at Perry High School. Students will have access to the curriculum and instruction in the classroom. Google Classroom is the primary location for

students to access material when absent from classes taught in person. Buzz is the primary location for COA students to access materials at all times.

- Clever cusd80.com/Page/45109 (select secondary courses will use clever)

Computer Requirements

Students can use devices to engage with electronic resources and turn-in select assignments.

Help

Academic Support

- Contact the teacher to schedule an appointment during office hours
- [NetTutor](https://cusd80.com/NetTutor) offers K-12 CUSD students free live tutoring, question drop-off, and writing feedback (cusd80.com/NetTutor)
- [Ed Tech](https://cusd80.com/Page/45109) support for students, parents/guardians, and community link (cusd80.com/Page/45109)

Mental Health Support

- CUSD's Counseling and Social Services Department provides access to mental health support for students and families through their webpage cusd80.com/Domain/10528
- US Department of Health and Human Services 9-8-8 hotline
- 24-hour Crisis Line Talk: 602-222-9444, Text: 741-741

Student Conduct, Success, and Responsibilities

Student Handbook

Students must follow the policies and procedures established in the Student Handbook. Copies of the handbook can be found at <https://www.cusd80.com/handbooks>. Printed copies will be provided upon request.

To be successful

Be prepared, with notes, HW and any assignment.

Have a positive attitude, actively participate in class discussions.

Ask questions.

Attend tutoring, sign up is available in the classroom agenda.

Google classroom is where you find the quarter calendar, notes and HW assignments.

Make up work when ever absent. Schedule a make up Test or quiz no more than the days you were absent for. If you were absent for 4 days your make up work or test should be done within 4 days.

Student Responsibilities

+Cell phone and headphone (ear bud) use is a distraction in the learning environment. I should not see a cell phone on a student's person during class, or ear buds in their ears. Students are expected to put their cell phones in the caddy and take out their ear buds upon entering the classroom. If there is a particular reason a student needs their phone (family emergency, etc.), they need to notify me the moment they walk into class, not after they get in trouble.

+Defacing property will not be tolerated. Defiant, disruptive, or disrespectful behavior toward me or other students will not be tolerated. Consequences may include removal from the class (for that period, that day), contact to parents, or an administrative referral.

+Cheating on assessments will not be tolerated. Consequences may include receiving a "0" on

the assessment, contact to parents and/or an administrative referral. Any device seen in a student's possession during a quiz/test is considered "cheating" and the device will be confiscated.

+Bathroom/Hall Passes: All I ask is that students be respectful about asking to use the restroom or getting a drink. They should ask to use the restroom during the appropriate time (they should not interrupt a lesson to ask) and be back promptly. I allow one student out of the classroom at a time. They may not bring their cell phones with them per school policy. Time in the bathroom is time out of class; students should ask to use the restroom only when they truly need to do so.

Late work

+Make-Up Work: This applies to students who were absent. When students are absent, they will be responsible for making up notes, assignments, and assessments that they miss for full credit. They can catch up by emailing me, using Google Classroom, or coming in for office hours. Students have as many days as they were absent to make up what they missed. If a student misses a test/quiz and the absence was excused, the grade will go in as "missing" and will calculate as a "0" until they make it up and the grade is replaced. If the absence is unexcused, they will receive a "0" on the assessment.

+Late work: In order to be successful in math class, students must keep up with lessons and assignments. In turn, late work will not be accepted.

+Retakes and Quiz Corrections: Students may come in for quiz corrections during office hours or conference. Quiz corrections is a second chance to improve their grade, students must do corrections without help of notes or teacher. They may earn half credit back on the re-take. There are no test re-takes or test corrections.

Assessments and Assignments

Students will complete assessments during each unit of study to assess their understanding. Students will complete the CUSD Common Final at the end of the first and second semesters. The Common Final will count for 20% of the student's final semester grade in grades 9-12 and 10% in grades 7-8 (some exceptions may apply at the Junior High level). Common finals will be in ELA, Math, Science, Social Science, and World Language.

Final exams will be given during the CUSD Jr High/High School Early Dismissal days in December and May, as identified on the [District Calendar](#).

If students are requested to participate in a survey, the survey questions will be provided to parents/guardians seven days before student contact.

Grading

Grade Percentage

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

Quarter grades

Quarter grades continue through the end of the semester and can be followed on Infinite Campus as "Semester Cumulative." Posted Progress Report and Quarter grades serve as a snapshot. "Assignments" (day-to-day tasks including homework, classwork, etc.) are weighted 20% of the Semester Cumulative grade and are generally graded for completion. "Assessments" (tests and quizzes) are weighted 80% of the Semester Cumulative grade and are graded for accuracy.

Semester grades

The following formula is used to calculate semester grades

- 80/20: A combination of the two quarters accounts for 80% of the semester grade and the final exam accounts for remaining 20%.

Units of study

Parents/Guardians should indicate if they "Agree" or "Disagree" with their student's participation in each of the following units of study.

Semester 1:

Chapter 1: Solving Linear Equations

Chapter 2: Solving Linear Inequalities

Chapter 3: Graphing Linear Functions

Chapter 4: Writing Linear Functions

Chapter 5: Solving Systems of Linear Equations

Probability

Chapter 11: Data Analysis and Displays

Semester 2:

Chapter 6: Exponential Functions and Sequences

Chapter 7: Polynomial Equations and Factoring

Chapter 8: Graphing Quadratic Functions

Chapter 9: Solving Quadratic Equations

**An asterisk will indicate a unit of study containing sexually explicit materials per legislative definitions.*