# Algebra 1A(CPM) - Course Syllabus

### I. Contact Information and "Office Hours"

See Individual teachers for schedule Homework Help: open-ebooks.cpm.org

II. **Course Description -** Algebra 1A opens with an introduction to functions. We then develop the mathematical definition of a function and learn how to use function notation. Linear functions are the main focus of the trimester.

# III. Course Objective (BIG IDEAS)

Unit 1: Functions - investigate the growth patterns of real-life situations, explicit description of graphs, definition of a function, function notation, and domain and range

Unit 1.5: Algebra Tiles - Solve problems using manipulatives and other methods

Unit 2: Linear Functions – connect geometric tile patterns to slope and y-intercept, measuring steepness of a line, slope as speed AND rate of change, complete the multiple representations web (using graphs, tables, equations and stories slope-intercept form

Unit 3: Simplifying and Solving - Simplify expressions with exponents (positive and negative), use algebra ties to solve equations, multiplying binomials using the distributive property, changing forms (solving for a variable)

#### IV. Course Materials

- Folder / binder: Organize all math assignments and notes (math only)
- Spiral Notebook: Organize journal entries and class work
- Calculator (scientific calculator): Finish homework outside of school
- "Planner" type device: Write down assignment due dates and stay organized ☺
- Writing Utensil: Pencils with eraser (pencils available to purchase for \$0.25)
- Good attitude: We'll all make mistakes and change our mind in the process of learning. A
  good attitude will make this process go smoother.

## V. Grading

Homework = 25%

QUIZ = 25%

TEST/PROJECT = 50%

Daily expectations:

Ready – Homework complete, materials out, prepared to learn Respect – Follow instructions, study team expectations Responsible – Take care of materials, help others

Test Corrections are available to all students.

May earn points back based on demonstrating mastery of missed objectives. Requires at least 2 appointments:

~1<sup>st</sup> appointment = discuss mistakes on original test and extra practice material provided. Any number of appointments necessary to gain confidence and learn

~2<sup>nd</sup> appointment = demonstrate mastery by completing NEW problems No "late work" is accepted for credit.

## VI. Course Schedule

Weeks 1 – 4: Unit 1 and 1.5 Functions and Algebra Tiles

Weeks 5 – 8: Unit 2 Linear Functions

Weeks 9 – 12: Unit 3 Simplifying and Solving

If a student would like to review or expand their knowledge in the areas they are studying, Google or YouTube search the topics listed in the course objectives.

Another great way to expand leaning is Khan Academy Algebra 1 Course (<a href="https://www.khanacademy.org/math/algebra">https://www.khanacademy.org/math/algebra</a>). It could be used to review topics, to extend to future content, and enrich Algebra 1 as a whole. It is also a great way to review for SAT. This is not mandatory.

## Other options are:

CPM (Algebra 1 links) which are from our present curriculum.

Parent Guide ... Examples, practice problems, and answers. https://pdfs.cpm.org/CoreConnections/ParentGuide/cca/CCA%20PG full version.pdf

Checkpoint problems with examples, practice problems, and answers (reference section of ebook ...this section may not open great on a phone. A computer might be better)

https://ebooks.cpm.org/bookdb.php?title=cca&name=reference.checkpoints&type=tcheckpoints