2 Year Integrated Math 110

| Board Approval Date: June 17, 2021 | Course Length: 4 Semesters |
| :--- | :--- |
| Grading: A-F | Credits: 5 Credits per Semester |
| Proposed Grade Level(s): 9, 10 | Subject Area: Mathematics <br> Elective Area (if applicable): |
| Prerequisite(s): <br> Math 8 and/or IM1 Foundations and IEP team <br> recommendation | Corequisite(s): <br> N/A |
| CTE Sector/Pathway: | Intent to Pursue 'A-G' College Prep Status: No <br> A-G Course Identifier: <br> Graduation Requirement: Yes <br> Course Intent: District Course <br> Program (if applicable): <br> The Folsom Cordova Unified School District prohibits discrimination, intimidation, harassment (including <br> sexual harassment) or bullying based on a person's actual or perceived ancestry, color, disability, race or <br> ethnicity, religion, gender, gender identity or gender expression, immigration status, national origin, sex, <br> sexual orientation, or association with a person or group with one or more of these actual or perceived <br> characteristics. For concerns/questions or complaints, contact the Title IX Coordinator(s) and Equity <br> Compliance Officer(s): Curtis Wilson, cmwilson@fcusd.org (grades K-5) and Jim Huber, Ed. D., <br> jhuber@fcusd.org (grades 6-12), 1965 Birkmont Drive, Rancho Cordova, CA 96742, 916-294-9000 <br> ext.104625 |

## COURSE DESCRIPTION: (Online Course)

2 Year Integrated Math $1 \mathbf{1 0}$ is an integrated math course designed to formalize and extend the mathematics that students learned in the middle grades. The standards are based on the Common Core State Standards for Mathematics and include topics from the conceptual categories: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Instructional time will focus on six critical areas: (1) extending understanding of numerical manipulation to algebraic manipulation; (2)
synthesizing understanding of function; (3) deepening and extend understanding of linear relationships; (4) applying linear models to data that exhibit a linear trend; (5) establishing criteria for congruence based on rigid motions; and (6) applying the Pythagorean Theorem to the coordinate plane.

As stated in the Mathematics Framework (2013), the fundamental purpose of Integrated Math $\mathbf{1}$ is to formalize and extend students' understanding of linear functions and their applications. The critical topics of study deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend.
Integrated Math 1 uses properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge from prior grade levels. The courses in the Integrated Pathway follow the structure introduced in the K-8 grade levels of the California Common Core State Standards for Mathematics (CA CCSSM), presenting mathematics as a coherent subject and blend standards from different conceptual categories.

## DETAILED UNITS OF INSTRUCTION:

| Unit Number/Title | Unit Essential Questions | Examples of Formative Assessments | Examples of Summative Assessment |
| :---: | :---: | :---: | :---: |
| 1. Solving Linear Equations | How can you use simple equations to solve real-life problems? <br> How can you use multi-step equations to solve real-life problems? <br> How can you solve an equation that has variables on both sides? <br> How can you solve absolute value equations? How can you use a formula for one measurement to write a formula for a different measurement? | *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | *Free Response problems that include solving multi-step linear equations in one variable that have variables on both side using inverse operations <br> *Using unit analysis to understand and model real-life problems *Identifying equations that have infinitely many solutions or no solutions Solving absolute value equations including those with two absolute values *Identifying extraneous solutions: and solving literal equations for one variable in terms of other variables |
| 2. Solving Linear Inequalities | How can you use an inequality to describe a real-life statement? <br> How can you use addition or subtraction to solve an inequality? <br> How can you use division | *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *Used to Think...But Now I | *Free Response problems that include Priority Standards from Chapter 1, along with a focus on writing linear inequalities and sketching graphs of linear inequalities |


|  | to solve an inequality? <br> How can you solve a multistep inequality? <br> How can you use inequalities to describe intervals on the real number line? <br> How can you solve an absolute value inequality? | Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | *Solving multi-step linear inequalities in one variable using inverse operations, including multiplying, and dividing by negative integers *Writing compound linear inequalities in one variable joined by the |
| :---: | :---: | :---: | :---: |
| 3. Graphing <br> Linear Functions | What is a function? <br> How can you determine whether a function is linear or nonlinear? <br> How can you use function notation to represent a function? <br> How can you describe the graph of the equation $\mathrm{Ax}+$ $\mathrm{By}=\mathrm{C}$ ? <br> How can you describe the graph of the equation $y=$ $\mathrm{mx}+\mathrm{b}$ ? <br> How does the graph of the linear function $f(x)=x$ compare to the graphs of $\mathrm{g}(\mathrm{x})=\mathrm{f}(\mathrm{x})+\mathrm{c}$ and $\mathrm{h}(\mathrm{x})=$ $\mathrm{f}(\mathrm{cx})$ ? | *Opposing Views <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Closure Statements: I feel confident about... or I am still confused about... | * Response problems that include Priority Standards from previous chapters, along with a focus on the domain and range of functions and independent and dependent variables *Linear functions using graphs, tables, and equations in two variables <br> *Using function notation to evaluate, interpret, solve, and graph functions <br> *Graphing linear equations written in standard form and slopeintercept form <br> *Finding slopes of nonvertical lines from graphs or tables; translating, reflecting, shrinking, and sketching graphs of linear functions; and combining transformations of graphs of linear functions. |
| 4. Writing Linear Functions | Given the graph of a linear function, how can you write an equation of the line? <br> How can you write an equation of a line when you are given the slope and a point on the line? <br> How can you recognize | *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory | *Free Response problems that include Priority Standards from previous chapters, along with a focus on writing equations of lines in slope-intercept form *Using slope to identify and write equations of |


|  | lines that are parallel or perpendicular? <br> How can you use a scatter plot and a line of fit to make conclusions about data? <br> How can you analytically find a line of best fit for a scatterplot? <br> How can you use an arithmetic sequence to describe a pattern? | *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Closure Statements: I feel confident about... or I am still confused about... | parallel lines and perpendicular lines <br> *Using scatter plots to describe relationships and draw lines of fit to write equations to model data *Analyzing lines of fit for sets of data using residuals, technology, and correlation coefficients <br> *Writing the terms of arithmetic sequences; graphing arithmetic sequences; and writing arithmetic sequences as equations and in function notation. |
| :---: | :---: | :---: | :---: |
| 5. Solving Systems of Linear Equations | How can you solve a system of linear equations? <br> How can you use substitution to solve a system of linear equations? How can you use elimination to solve a system of linear equations? Can systems of linear equations have no solution or infinitely many solutions? <br> How can you use a system of linear equations to solve an equation with variables on both sides? <br> How can you graph a linear inequality in two variables? How can you graph a system of linear inequalities? | *Example/Non-Example <br> (student generated) <br> *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always-Sometimes-Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | *Free Response problems that include Priority Standards from previous chapters, along with a focus on solving systems of linear equations in two variables by graphing, substitution, and elimination <br> *Determining the number of solutions in a system of linear equations; using graphing to solve systems of linear equations and absolute value equations *Checking solutions of linear inequalities in two variables algebraically; graphing linear inequalities in one and two variables on the coordinate plane; and graphing and writing systems of linear inequalities in two variables. |
| 6. Exponential Functions and Sequences | What are some of the characteristics of the graph of an exponential function? | *Response Thinking Logs <br> *Writing Stems <br> *Response Logs | *Free Response problems that include Priority Standards from previous |


|  | What are some of the characteristics of exponential growth and exponential decay functions? <br> How can you compare the growth rates of linear and exponential functions? How can you solve an exponential equation graphically? <br> How can you use a geometric sequence to describe a pattern? How can you define a sequence recursively? | *Example/Non-Example <br> (student generated) <br> *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | chapters, along with a focus on identifying, evaluating, and graphing exponential functions <br> *Using exponential growth and decay functions to determine the percent rate of change *Solving exponential equations algebraically and graphically; extending and graphing geometric sequences *Writing geometric sequences as equations and in function notation; writing rules of recursively defined sequences; and translating between recursive rules and explicit rules |
| :---: | :---: | :---: | :---: |
| 7. Data Analysis and Displays | How can you describe the variation of a data set? <br> How can you use a box-and-whisker plot to describe a data set? How can you use a histogram to characterize the basic shape of distribution? <br> How can you read and make a two-way table? How can you display data in a way that helps you make decisions? | *Visitor Explanation <br> *Response Thinking Logs <br> *Writing Stems <br> *Response Logs <br> *Example/Non-Example <br> (student generated) <br> *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | *Free Response problems that include Priority Standards from previous chapters, along with a focus on comparing the mean, median, mode, range and standard deviation of data sets *Identifying the effects of transformations on data; constructing and interpreting box-andwhisker plots and using them to compare data sets *Describing the shapes of data distributions; comparing data distributions; making two-way tables, interpreting marginal frequencies, finding relative and conditional relative frequencies *Classifying data as qualitative or quantitative; creating |


|  |  |  | appropriate data displays; and analyzing misleading graphs. |
| :---: | :---: | :---: | :---: |
| 8. Basics of Geometry | How can you use dynamic geometry software to visualize geometric concepts? <br> How can you measure and construct a line segment? How can you find the midpoint and length of a line segment in a coordinate plane? How can you find the perimeter and area of a polygon in a coordinate plane? <br> How can you measure and classify an angle? <br> How can you describe angle pair relationships and use the description to find angle measures? | *Give Me Five <br> *Visitor Explanation <br> *Response Thinking Logs <br> *Writing Stems <br> *Response Logs <br> *Example/Non-Example <br> (student generated) <br> *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | *Free Response problems that include Priority Standards from previous chapters, along with a focus on understanding precise definitions of point, line, parallel line, perpendicular line, plane, line segment, rays, angle, angle classifications, and circle <br> *Using the Ruler Postulate, Segment Addition Postulate, midpoints, segment bisectors, and the Distance Formula to find segment lengths <br> *Using the Midpoint Formula to find the coordinates of midpoints of segments, and on the coordinate plane <br> *Working with polygons to classify them, inscribe them in circles, and finding their perimeter and area, on the coordinate plane <br> *Using the Protractor Postulate and Angle Addition Postulate to find angle measures; identifying and solving complementary angles, supplementary angles, adjacent angles, linear pairs, and vertical angles |
| 9. Reasoning and Proofs | When is a conditional statement true or false? How can you use reasoning to solve problems? <br> In a diagram, what can be | *Give Me Five <br> *Visitor Explanation <br> *Response Thinking Logs <br> *Writing Stems <br> *Response Logs | *Free Response problems that include Priority Standards from previous chapters, along with a focus on writing |


|  | assumed and what needs to be labeled? <br> How can you prove a mathematical statement? <br> How can you use a flowchart to prove a mathematical statement? | *Example/Non-Example <br> (student generated) <br> *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about. . . or I am still confused about... | conditional and biconditional statements *Using truth tables to determine when a conditional statement is true; applying inductive and deductive reasoning; using postulates about points, lines, and planes *Using the properties of equality to justify steps in solving problems involving segment lengths and angle measures; and writing proofs for geometric relationships |
| :---: | :---: | :---: | :---: |
| 10. Parallel and <br> Perpendicular <br> Lines | What does it mean when two lines are parallel, intersecting, coincident, or skew? <br> When two parallel lines are cut by a transversal, which of the resulting pairs of angles are congruent? When two parallel lines are cut by a transversal, which of the resulting pairs of angles are supplementary? <br> For which of the theorems involving parallel lines and transversals is the converse true? <br> What conjectures can you make about perpendicular lines? <br> How can you find the distance between two parallel lines? | *Paired Verbal Fluency <br> *Give Me Five <br> *Visitor Explanation <br> *Response Thinking Logs <br> *Writing Stems <br> *Response Logs <br> *Example/Non-Example <br> (student generated) <br> *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I <br> Know.... <br> *Whiteboarding <br> *Closure Statements: I feel | *Free Response problems that include Priority Standards from previous chapters, along with a focus on identifying parallel lines, perpendicular lines, skew lines, parallel planes, and pairs of angles formed by a transversal <br> *Using properties and theorems of parallel lines and perpendicular lines; constructing parallel lines, perpendicular lines, and perpendicular bisectors; and determining the distance from a point to a line and between two parallel lines |


|  |  | confident about... or I am still confused about... |  |
| :---: | :---: | :---: | :---: |
| 11. <br> Transformations | How can you translate a figure in a coordinate plane? <br> How can you reflect a figure in a coordinate plane? <br> How can you rotate a figure in a coordinate plane? <br> What conjectures can you make about a figure reflected in two lines? | *Paired Verbal Fluency <br> *Partner Speaks <br> *Give Me Five <br> *Visitor Explanation <br> *Response Thinking Logs <br> *Writing Stems <br> *Response Logs <br> *Example/Non-Example <br> (student generated) <br> *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | *Free Response problems that include Priority Standards from previous chapters, along with a focus on performing translations, reflections, rotations, and compositions of transformations *Identifying lines of symmetry, rotational symmetry, and the center of symmetry; and describing and performing congruence transformations |
| 12. Congruent Triangles | How are the angle measures of a triangle related? <br> Given two congruent triangles, how can you use rigid motions to map one triangle to the other triangle? <br> What can you conclude about two triangles when you know that two pairs of corresponding sides and the corresponding included angles are congruent? What conjectures can you make about the side lengths | *Which One Doesn't Belong? <br> *Paired Verbal Fluency <br> *Predict, Explain, Observe <br> Probe <br> *Pass the Problem <br> *Three Minute Pause <br> *Response Cards <br> *Partner Speaks <br> *Give Me Five <br> *Visitor Explanation <br> *Response Thinking Logs <br> *Writing Stems <br> *Response Logs <br> *Example/Non-Example <br> (student generated) | *Free Response problems that include Priority Standards from previous chapters, along with a focus on identifying and using corresponding parts of congruent figures *Using theorems to find angle measures; using the Congruence Theorems SAS, SSS, HL, ASA, and AAS to prove two triangles congruent *Using congruent triangles to solve problems and write |


|  | and angle measures of an isosceles triangle? <br> What can you conclude about two triangles when you know the corresponding sides are congruent? <br> What information is sufficient to determine whether two triangles are congruent? <br> How can you use congruent triangles to make an indirect measure? <br> How can you use a coordinate plane to write a proof? | *Think Alouds <br> *Fact-First Questioning <br> *Opposing Views <br> *Always - Sometimes - Never <br> *3-2-1 Reflection Sheet <br> *Writing prompt <br> *Point of Most Significance <br> *Muddiest Point <br> *Learning Goals Inventory <br> *Think-Pair-Share <br> *Exit Ticket <br> *No Hands Questioning <br> *Wait Time <br> *Turn and Talk <br> *I Used to Think...But Now I Know.... <br> *Whiteboarding <br> *Closure Statements: I feel confident about... or I am still confused about... | proofs; and writing coordinate proofs to prove geometric relationships |
| :---: | :---: | :---: | :---: |

## ESSENTIAL STANDARDS:

## ALGEBRA

Interpret the Structure of Expressions
A-SSE-1a Interpret expressions that represent a quantity in terms of its context.
a. Interpret parts of an expression, such as terms, factors, and coefficients.

Create equations that describe numbers or relationships.
A-CED-1 Create equations and inequalities in one variable including ones with absolute value and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions
A-CED-2 Create equations in two or more variables to represent relationships between quantities, graph equations on coordinate axes with labels and scales.
A-CED-4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.

Understand solving equations as a process of reasoning and explain the reasoning.
A-REI-1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

Solve equations and inequalities in one variable.
A-REI-3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. Linear inequalities; literal equations that are linear in the variables being solved for; exponential of a form such as $2 \mathrm{x}=116$.
A-REI-6 Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

Represent and solve equations and inequalities graphically
A-REI-12 Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

## Functions

Understand the concept of a function and use function notation.
F-IF-1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If $f$ is a function and $x$ is an element of its domain, then $f(x)$ denotes the output of $f$ corresponding to the input $x$. The graph of $f$ is the graph of the equation $y=f(x)$.
F-IF-2 Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

Interpret functions that arise in applications in terms of the context.
F-IF-4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.
F-IF-6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.

Analyze functions using different representations.
F-IF-7a Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
a. Graph linear and quadratic functions and show intercepts, maxima, and minima.

F-IF-7e Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.
F-IF-9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

Construct and compare linear, quadratic, and exponential models and solve problems.
F-LE-1a Distinguish between situations that can be modeled with linear functions and with exponential functions.
a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.
F-LE-2 Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (including reading these from a table).
F-LE-3 Observes using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.

## Geometry

Experiment with transformations in the plane.
G-CO-1 Knows precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. G-CO-5 Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.

Understand congruence in terms of rigid motions.
G-CO-7 Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.

Use coordinates to prove simple geometric theorems algebraically.
G-GPE-5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).
G-GPE-7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.

Statistics and Probability
Summarize, represent, and interpret data on a single count or measurement variable.
S-ID-1 Represent data with plots on the real number line (dot plots, histograms, and box plots).
S-ID-2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.
S-ID-3 Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.

Summarize, represent, and interpret data on two categorical and quantitative variables.
S-ID-6 Represent data on two quantitative variables on a scatter plot and describe how the variables are related.
a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. b. Informally assess the fit of a function by plotting and analyzing residuals.
c. Fit a linear function for a scatter plot that suggests a linear association.

Interpret linear models.
S-ID-7 Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

## RELEVANT STANDARDS AND FRAMEWORKS, CONTENT/PROGRAM SPECIFIC STANDARDS:

## Link to Common Core Standards (if applicable):

Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school.
https://www.cde.ca.gov/be/st/ss/documents/ccssmathstandardaug2013.pdf

## Link to Framework (if applicable):

Curriculum frameworks provide guidance for implementing the content standards adopted by the State Board of Education (SBE). Frameworks are developed by the Instructional Quality Commission, formerly known as the Curriculum Development and Supplemental Materials Commission, which also reviews and recommends textbooks and other instructional materials to be adopted by the SBE.
https://www.cde.ca.gov/ci/ma/cf/documents/mathfwmathematics1jl.pdf

## Link to Subject Area Content Standards (if applicable):

Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level.
https://www.cde.ca.gov/ci/ma/cf/documents/mathfwmathematics1jl.pdf

## Link to Program Content Area Standards (if applicable):

Program Content Area Standards apply to programs such as International Baccalaureate, Advanced Placement, Career and Technical Education, etc.

## TEXTBOOKS AND RESOURCE MATERIALS:

Textbooks

| Board <br> Approved | Pilot <br> Completion <br> Date <br> (If applicable) | Textbook Title | Author(s) | Publisher | Edition | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes |  | Big Ideas Math <br> Integrated Math I | Ron Larson and <br> Laurie Boswell | Cengage/Nat <br> ional <br> Geographic/ <br> Big Ideas <br> Learning | $1 / 1 / 2016$ |  |

## Other Resource Materials

iReady: Prescriptive Lessons

## Supplemental Materials

Board approved supplemental materials (Including but not limited to: Film Clips, Digital Resources, Supplemental texts, DVDs, Programs (Pebble Creek, DBQ, etc.):
N/A

