

COURSE TITLE

Math 307/407

LENGTH

Full Year

DEPARTMENT

STEM Department

SCHOOL

Rutherford High School

DATE

September 10, 2018

Math 307/407

I. Introduction/Overview/Philosophy

Mathematics 307/407 is the course intended to introduce students to the mathematical practices and skills they will need in their everyday lives. It is not a subject to be learned primarily from books or computers. Students in this course will learn the practicality of the mathematical concepts learned in previous courses. Through a variety of activities students will be able to experience the theories of the mathematical world around them. The goal of the course is to investigate the uses of mathematics in such areas as money, measurement, making purchases, investing, paying taxes, and managing a household.

Students who take this course will develop the ability to think creatively about mathematics and reason logically. They will focus on problem solving and communicating mathematically. They will gain skills that are needed to succeed in the workplace of the twenty-first century. Students in this course will continue to appreciate the application of mathematics to the real world by examining where and how algebraic concepts are used in everyday life.

II. Objectives

Course Outline:

1. Understand the concept of money and monetary relationships by: (working with decimals, solving equations, working with percentages, order of operations)
 - a. Computing weekly and annual wages.
 - b. Determining daily and weekly hours worked.
 - c. Computing wages when overtime is involved.
 - d. Determining wages for jobs involving piecework or tips.
 - e. Using rounding to determine salary in a pay period.
 - f. Computing salary for different pay periods.
 - g. Using percents and decimals to compute commissions.
 - h. Distinguishing between and computing gross pay and net pay.
2. Apply mathematical skills to purchasing food by:
 - a. Reading and comparing prices.
 - b. Changing prices from cents to dollars and vice versa.
 - c. Computing the cost of single items and multiple items.
 - d. Calculating change.
 - e. Using information on coupons to determine the discounted price of an item.
 - f. Comparing and computing unit prices.
 - g. Computing a restaurant bill and tip.
 - h. Comparing the cost of eating out to eating at home.
3. Explore ways to purchase clothes by:
 - a. Computing the cost of clothing, including sales tax.
 - b. Determining the amount saved due to sale prices and discounts.
 - c. Reading catalog/online descriptions and ordering.
 - d. Investigating costs involved with making clothing.

- e. Computing balances on charge accounts.
- f. Determining a schedule and costs for a layaway plan.
4. Determine housing costs and monthly expenses by:
 - a. Applying the renter's rule and banker's rule to plan monthly rent or mortgage payments.
 - b. Computing the cost of rent for one year.
 - c. Solving problems related to down payments, monthly payments, and total amounts paid for mortgages.
 - d. Reading utility meters and computing monthly utility expenses.
 - e. Solving word problems related to monthly expenses.
 - f. Computing expenses related to mortgage insurance and homeowners insurance.
5. Investigate expenses involved in buying and maintaining a car by:
 - a. Determining the cost of an automobile when trade-ins or rebates are involved.
 - b. Computing the cost of an automobile when financing is used.
 - c. Calculating insurance premiums.
 - d. Calculating average miles driven and miles traveled.
 - e. Computing average speed and driving time.
 - f. Calculating fuel costs.
 - g. Calculating costs involved with car repairs.
6. Learning the mathematics used in selecting and preparing food by:
 - a. Calculating the number of calories consumed.
 - b. Using ratios and proportions to calculate fat calories and change recipe yields.
 - c. Reading and interpreting nutrition information on food packages.
 - d. Finding the number of calories the body uses when exercising.
 - e. Calculate the times food should begin cooking and be ready.
 - f. Using nutrition information when planning meals.
7. Exploring the costs of home improvements by:
 - a. Computing payments for purchases of items including regular price, sale price and discount rate
 - b. Using elapsed time to determine the date of payment
 - c. Estimating the quantity of materials needed to improve a room.
 - d. Calculating the amount and cost of yard maintenance.
 - e. Finding the length of fencing needed to enclose a yard.
8. Plan and investigate costs involved in traveling by:
 - a. Reading maps and computing distances.
 - b. Calculating travel fares and hotel expenses.
 - c. Finding the exchange value of US dollars and other currencies
 - d. Calculating the costs involved in car rentals.
 - e. Comparing times in different time zones.
 - f. Calculating flight times between different time zones.
 - g. Planning a road trip with scheduled stops.
9. Plan and budget for their financial future by:
 - a. Computing average income.
 - b. Computing the percent of income to be spent on each budget item.
 - c. Reading and creating circle graphs to summarize budget spending.
 - d. Completing records to determine whether a budget is balanced.
10. Understand the skills required in banking an investing by:
 - a. Computing and comparing earnings from simple and compound interest.
 - b. Calculating the value of investments over time.
 - c. Using and maintaining a checking account.

- d. Determining the value of stocks and computing gains and losses.
 - e. Evaluating profits and losses from investments.
 - f. Calculating finance charges on credit cards.
11. Investigate taxes by:
- a. Reading and writing large numbers and calculating percentages of large numbers.
 - b. Calculating exemptions, deductions, and taxable income
 - c. Reading and using tax tables to estimate taxes.
 - d. Computing assessed values and property taxes.
 - e. Expressing property tax rates as percents.
 - f. Determining effective tax rates.

Student Outcomes:

After successfully completing this course, the student will:

- Understand mathematics as a logical structure of abstract thinking.
- Manipulate arithmetical expressions and apply the results appropriately to problem-solving situations.
- Use technology appropriately to solve numerical problems.
- Represent and understand the behavior of a variety of mathematical relationships and algebraic functions and use them to model real-world phenomena.

New Jersey Student Learning Standards

CAREER READY PRACTICES

CRP1 Act as a responsible and contributing citizen and employee.

Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.

CRP2 Apply appropriate academic and technical skills.

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation

CRP4 Communicate clearly and effectively and with reason.

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.

CRP6. Demonstrate creativity and innovation.

Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.

CRP7. Employ valid and reliable research strategies.

Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.

CRP11. Use technology to enhance productivity.

Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.

TECHNOLOGY

Standard 8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Strand A. Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.

8.1.12.A.1- Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.

21ST CENTURY LIFE AND CAREERS

9.1 Personal Financial Literacy

Strand B: Money Management

9.1.12.B.2 Compare strategies for saving and investing and the factors that influence how much should be saved or invested to meet financial goals.

9.1.12.B.10 Develop a plan that uses the services of various financial institutions to meet personal and family financial goals.

Strand C: Credit and Debt Management

9.1.12.C.1 Compare and contrast the financial benefits of different products and services offered by a variety of financial institutions.

9.1.12.C.3 Compute and assess the accumulating effect of interest paid over time when using a variety of sources of credit.

Strand F: Civic Financial Responsibility

9.1.12.F.6 Explain the concept and forms of taxation and justify the use of taxation to fund public activities and initiatives.

9.2 Career Awareness, Exploration, and Preparation

Strand C: Career Preparation

9.2.12.C.5 Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.

NEW JERSEY STUDENT LEARNING STANDARDS- MATH

A.APR.A.1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

A.APR.B.3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.

A.CED.A.1. Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear functions and quadratic functions, and simple rational and exponential functions.

A.CED.A.2. Create equations in two or more variables to represent relationships between quantities; Graph equations on coordinate axes with labels and scales.

A.CED.A.3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.

A.CED.A.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R .

A.REI.A.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.

A.REI.B.3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

A.REI.B.4. Solve quadratic equations in one variable.

A.REI.B.4a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.

A.REI.B.4b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b .

A.REI.C.5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.

A.REI.C.6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

A.REI.D.10. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). [Focus on linear equations.]

A.REI.D.11. Explain why the x -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.*

A.REI.D.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.

A.SSE.A.1. Interpret expressions that represent a quantity in terms of its context.

A.SSE.A.1a: Interpret parts of an expression, such as terms, factors, and coefficients.

A.SSE.A.1b: Interpret complicated expressions by viewing one or more of their parts as a single entity.

For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P .

A.SSE.A.2. Use the structure of an expression to identify ways to rewrite it.

A.SSE.B.3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.

A.SSE.B.3a. Factor a quadratic expression to reveal the zeros of the function it defines.

A.SSE.B.3b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.

A.SSE.B.3c. Use the properties of exponents to transform expressions for exponential functions. For example the expression $1.15t$ can be rewritten as $(1.151/12)^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.

F.BF.A.1. Write a function that describes a relationship between two quantities.

F.BF.A.1a. Determine an explicit expression, a recursive process, or steps for calculation from a context.

F.BF.B.3. Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them.

F.IF.A.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.A.2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

F.IF.A.3. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.

F.IF.B.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.B.5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.

F.IF.B.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.

F.IF.C.7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.

F.IF.C.7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.

F.IF.C.7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.

F.IF.C.8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.

F.IF.C.8a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.

F.IF.C.9. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

F.LE.A.1. Distinguish between situations that can be modeled with linear functions and with exponential functions.

F.LE.A.1a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.

F.LE.A.1b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.

F.LE.A.1c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

F.LE.A.2. Construct linear and exponential functions - including arithmetic and geometric sequences - given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

F.LE.A.3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.

F.LE.B.5. Interpret the parameters in a linear or exponential function in terms of a context.

For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.

N.Q.A.1. Use units as a way to understand problems and to guide the solution of multi-step problems; Choose and interpret units consistently in formulas; Choose and interpret the scale and the origin in graphs and data displays.

N.Q.A.2. Define appropriate quantities for the purpose of descriptive modeling.

N.Q.A.3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

N.RN.B.3. Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.

III. Proficiency Levels

Math 307/407 is designed for students in Grades 11 and 12 who meet the necessary criteria for placement in the course.

IV. Methods of Assessment

Student Assessment

The teacher will provide a variety of assessments during the course of the year. The assessment may include but is not limited to: chapter and unit tests and quizzes, application problems, homework, and projects.

Curriculum/Teacher Assessment

The teacher will provide the subject area supervisor with suggestions for changes on an ongoing basis.

V. Grouping

Math 307/407 is grouped by ability level. Students are placed in this course per need identified by the Child Study Team.

VI. Articulation/Scope & Sequence/Time Frame

Course length is one year.

VII. Resources

Texts/Supplemental Reading/References

Resources may include: `

Consumer Mathematics, AGS Globe, 2003.

www.ixl.com

Algebra 1 Texts

Geometry Texts

VIII. Suggested Activities

Appropriate activities are listed in the map below.

IX. Methodologies

The following methods of instruction are suggested: teacher guided explorations, working in groups/working with a partner, working with manipulatives and discovery activities.

X. Interdisciplinary Connections

At this grade level, connections to many other disciplines are appropriate and natural. Reading and writing become an integral part of the mathematics process. Connections with science are frequent throughout both curricula. Technology plays an important part in learning mathematics as well.

XI. Differentiating Instruction for Students with Special Needs: Students with Disabilities, Students at Risk, English Language Learners, and Gifted & Talented Students

Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways as they celebrate students' prior knowledge. By providing appropriately challenging learning, teachers can maximize success for all students.

Differentiating in this course includes but is not limited to:

Differentiation for Support (ELL, Special Education, Students at Risk)

- Peer mentoring on problems
- Differentiated teacher feedback on assignments
- Modeling out problems on whiteboard
- Visual aids as we project problems on whiteboard
- Study guides
- Tiered assignments
- Scaffolding of materials and assignments
- Re-teaching and review
- Guided note taking
- Exemplars of varied performance levels

- Multi-media approach to accommodating various learning styles

Differentiation for Enrichment

- Supplemental reading material for independent study
- Flexible grouping
- Tiered assignments
- Topic selection by interest
- Enhanced expectations for independent study
- Elevated questioning techniques using Webb's Depth of Knowledge matrix

XII. Professional Development

The teacher will continue to improve expertise through participation in a variety of professional development opportunities.

XII. Curriculum Map/Pacing Guide

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk, English Language Learners, & Gifted & Talented Students	Standards	Assessments
Arithmetic Operations <ul style="list-style-type: none"> • PEMDAS • Working with Decimals • Solving Equations • Working with Percentages 	5 weeks	<i>For Support:</i> <ul style="list-style-type: none"> • Guided notes • Teacher modeling • Scaffolding (breaking down acronym i.e.; PEMDAS backwards into parts) • Use of algebra manipulative • Assessment accommodations (extended time, use of calculator) <i>For Enhancement:</i> <ul style="list-style-type: none"> • Advanced problems involving fractions, decimals. • Khan Academy Practice/Khan SAT • Use of IXL 	A-CED.A.1 A-SSE.A.1a A-CED.A.4 A-REI.A.1 A-REI.B.3 CRP1,2,4,6,7,8,11	<i>Formative Assessments:</i> Questioning, Do nows, classwork, homework <i>Summative Assessments:</i> Quiz Project Test
Money <ul style="list-style-type: none"> • Wages • Overtime • Tips • Salary • Commissions • Gross vs. Net Pay 	5 weeks	<i>For Support:</i> <ul style="list-style-type: none"> • Guided notes • Teacher modeling • Visual learning, including graphic organizer • Use of note card for cues • Assessment accommodations (extended time, use of 	A-REI.B.3 A-CED.A.1 A-CED.A.3 A-CED.A.4 CRP1,2,4,6,7,8,11 8.1.12.C.1 9.2.12.C.5	<i>Formative Assessments:</i> Questioning, Do nows, classwork, homework <i>Summative Assessments:</i> Quiz Project Test

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk, English Language Learners, & Gifted & Talented Students	Standards	Assessments
		calculator) <i>For Enhancement:</i> <ul style="list-style-type: none"> • Use of IXL • Real-world problems and scenarios • Student choice 		
Banking <ul style="list-style-type: none"> • Budgeting • Bank accounts • Interest 	5 weeks	<i>For Support:</i> <ul style="list-style-type: none"> • Use of IXL • Use of graphing calculator • Use of graphic organizers • Use of visual formats • Assessment accommodations (extended time, use of calculator) <i>For Enhancement:</i> <ul style="list-style-type: none"> • Use of IXL • Illustrative Mathematics Activities • Representing real-world sceneries using linear graphs • Using graph to predict real-world solutions 	F-IF.A.1 F-IF.A.2 F-IF.B.4 F-IF.B.5 F-IF.B.6 F-IF.C.7a A-REI.D.10 CRP1,2,4,6,7,8,11 9.1.12.C.1 9.1.12.C.3 9.1.12.B.2	<i>Formative Assessments:</i> Questioning, Do nows, classwork, homework <i>Summative Assessments:</i> Quiz Project Test
Housing <ul style="list-style-type: none"> • Rent • Home Improvements • Discounts • Utilities 	5 weeks	<i>For Support:</i> <ul style="list-style-type: none"> • Use of graphic organizer • Assessment accommodations (extended time, use of calculator) 	F-BF.A.1a F-BF.A.2 F-LE.2 A-CED.A.2 A-CED.A.4	<i>Formative Assessments:</i> Questioning, Do nows, classwork, homework

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk, English Language Learners, & Gifted & Talented Students	Standards	Assessments
		<ul style="list-style-type: none"> • Use of note card with formulas <p><i>For Enhancement:</i></p> <ul style="list-style-type: none"> • Use of IXL • Student-driven projects 	A-REI.D.10 F-LE.A.2 A-SSE.A.1 A-SSE.B.3 CRP1,2,4,6,7,8,11 9.1.12.B.10	<p><i>Summative Assessments:</i></p> Quiz Project Test
Shopping <ul style="list-style-type: none"> • Sales • Sales Tax • Online ordering • Credit Cards 	5 weeks	<p><i>For Support:</i></p> <ul style="list-style-type: none"> • Guided notes • Teacher modeling • Scaffolding (breaking down acronym i.e.; PEMDAS backwards into parts) • Use of algebra manipulative • Assessment accommodations (extended time, use of calculator) <p><i>For Enhancement:</i></p> <ul style="list-style-type: none"> • Advanced problems involving fractions, decimals. • Khan Academy Practice/Khan SAT • Use of IXL 	A-CED.A.1 A-SSE.A.1a A-CED.A.4 A-REI.A.1 A-REI.B.3 CRP1,2,4,6,7,8,11 9.1.12.F.6	<p><i>Formative Assessments:</i></p> Questioning, Do nows, classwork, homework
Food <ul style="list-style-type: none"> • Calories • Nutrition Information • Recipes • Cost of Recipe • Cooking Time 	5 weeks	<p><i>For Support:</i></p> <ul style="list-style-type: none"> • Guided notes • Teacher modeling • Visual learning, including graphic organizer • Use of note card for cues • Assessment accommodations 	A-REI.B.3 A-CED.A.1 A-CED.A.3 A-CED.A.4 CRP1,2,4,6,7,8,11	<p><i>Formative Assessments:</i></p> Questioning, Do nows, classwork, homework
				<p><i>Summative Assessments:</i></p> Quiz

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk, English Language Learners, & Gifted & Talented Students	Standards	Assessments
		(extended time, use of calculator) <i>For Enhancement:</i> <ul style="list-style-type: none"> • Use of IXL • Real-world problems and scenarios • Student choice 		Project Test
Transportation <ul style="list-style-type: none"> • Cost of Car- leasing vs buying • Car repairs • Gas • Planning a trip- miles vs. driving time 	5 weeks	<i>For Support:</i> <ul style="list-style-type: none"> • Use of IXL • Use of graphing calculator • Use of graphic organizers • Use of visual formats • Assessment accommodations (extended time, use of calculator) <i>For Enhancement:</i> <ul style="list-style-type: none"> • Use of IXL • Illustrative Mathematics Activities • Representing real-world sceneries using linear graphs • Using graph to predict real-world solutions 	F-IF.A.1 F-IF.A.2 F-IF.B.4 F-IF.B.5 F-IF.B.6 F-IF.C.7a A-REI.D.10 CRP1,2,4,6,7,8,11	<i>Formative Assessments:</i> Questioning, Do nows, classwork, homework <i>Summative Assessments:</i> Quiz Project Test
Taxes <ul style="list-style-type: none"> • Taxable income • Tax tables • Tax rates 	5 weeks	<i>For Support:</i> <ul style="list-style-type: none"> • Use of graphic organizer • Assessment accommodations (extended time, use of 	F-BF.A.1a F-BF.A.2 F-LE.2 A-CED.A.2	<i>Formative Assessments:</i> Questioning, Do nows, classwork, homework

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk, English Language Learners, & Gifted & Talented Students	Standards	Assessments
<ul style="list-style-type: none"> Property taxes 		calculator) <ul style="list-style-type: none"> Use of note card with formulas <i>For Enhancement:</i> <ul style="list-style-type: none"> Use of IXL Student-driven projects 	A-CED.A.4 A-REI.D.10 F-LE.A.2 A-SSE.A.1 A-SSE.B.3 CRP1,2,4,6,7,8,11	<i>Summative Assessments:</i> Quiz Project Test