**First Nine Weeks** [**(unpacked standards)**](https://drive.google.com/a/hcsb.k12.fl.us/folderview?id=0B2-WKQ2DKPVcZ3N5SEloYXZvT3c&usp=sharing&tid=0B2-WKQ2DKPVcWnZES2JKQUlBZFE)

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| **Sequence** | **Standard Description** | **Resources** | **Assessment** |
| **Weeks 1 - 4 (Q1)****8/10 - 9/2** | **Solve linear equations in one variable.** [**MAFS.8.EE.3.7:**](http://www.cpalms.org/Public/PreviewStandard/Preview/5496)  Calculator: YesSolve linear equations in one variable.a.    Give examples of linear equations in one variable with one solution, infinitely many solutions,     or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers).b.     Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. | **CMP3:**SWSInv. 1 (Problems 1-4)Inv. 2 (Problems 1-4)Inv. 3 (Problems 1 & 2)Inv. 4 (Prob. 1, 2, & 4)Inv. 5 (Problem 1)**CPALMS Lessons:**8.EE.3.7 **-** [Building & Solving Equations](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/46854)  | [**MATH ITEM SPECIFICATIONS**](http://fsassessments.org/wp-content/uploads/2015/03/Grade-8-Math-Test-Item-Specifications.pdf)**MFAS:***8.EE.3.7*[Counting Solutions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59450)[Equation Phototypes](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59451)[Linear Equations](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188) |
| **Weeks 5 - 9 (Q1)****9/6 - 10/13** | **Know that there are numbers that are not rational, and approximate them by rational numbers.**[**MAFS.8.NS.1.1**](http://www.cpalms.org/Public/PreviewStandard/Preview/5488)  Calculator: NoKnow that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.[**MAFS.8.NS.1.2**](http://www.cpalms.org/Public/PreviewStandard/Preview/5489)  Calculator: NoUse rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π2). **Work with radicals and integer exponents.**[**MAFS.8.EE.1.2**](http://www.cpalms.org/Public/PreviewStandard/Preview/5491)Calculator: YesUse square root and cube root symbols to represent solutions to equations of the form x² = p and x³ = p, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that √2 is irrational.**Understand and apply the Pythagorean Theorem.**[**MAFS.8.G.2.6**](http://www.cpalms.org/Public/PreviewStandard/Preview/5508) Calculator: YesExplain a proof of the Pythagorean Theorem and its converse.**Understand and apply the Pythagorean Theorem.**[**MAFS.8.G.2.7**](http://www.cpalms.org/Public/PreviewStandard/Preview/5509) Calculator: YesApply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.[**MAFS.8.G.2.8**](http://www.cpalms.org/Public/PreviewStandard/Preview/5510)Calculator: YesApply the Pythagorean Theorem to find the distance between two points in a coordinate system. | **CMP3**LFPInv. 4 (Problems 2 & 3)Inv. 1 (Problems 1-3)Inv. 2 (Problems 1-4)Inv. 3 (Problems 1 & 2)Inv. 5 (Problem 1)**CPALMS Lessons:**8.NS.1.1 **-** [Repeating Decimals](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)8.NS.1.2 - [It's Hip to Be (an Imperfect) Square!](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)8.EE.1.2 - [Difference of Two Squares](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)8.G.2.6 - [Proving Pythagoras](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)8.EE.1.2 **-** [Number Relationship](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)8.G.2.7 - [Keep Calm and Hypotenuse On](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)8.G.2.8 - [Square Areas](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188) | **MFAS:***8.NS.1.1*[Dec. to Frac](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)[Frac. to Dec.](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)[Rational Numbers](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)[Repeating Decimals](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)*8.NS.1.2*[Approximating Irrational](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)[Comparing Irrational](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)*8.EE.1.2*[Dimensions Needed](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)8.G.2.6[Converse of the](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188) [Pythagorean Theorem](http://www.cpalms.org/Public/PreviewResource/Preview/70752)*8.EE.1.2*[Roots and Radicals](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)[The Root of the Problem](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)*8.G.2.7*[Distance Between Two Points](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188)*8.G.2.8*[Coordinate Plane Triangle](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59188) |
| **Week 9 (Q1)** | **1st 9 Week Review & Exams** |  |  |
| ***End of First Nine Weeks Exam*** |
| ***Professional Day*** |

**Second Nine Weeks!** [**(Unpacked Standards)**](https://drive.google.com/a/hcsb.k12.fl.us/folderview?id=0B2-WKQ2DKPVcblJObDdIRFFCU3c&usp=sharing&tid=0B2-WKQ2DKPVcWnZES2JKQUlBZFE)

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| **Sequence** | **Standard Description** | **Resources** | **Assessment** |
| **Weeks 1-3 (Q2)****10/17 - 11/4** | **Understand congruence and similarity using physical models, transparencies, or geometry software.**[**MAFS.8.G.1.1**](http://www.cpalms.org/Public/PreviewStandard/Preview/5503) Calculator: NeutralVerify experimentally the properties of rotations, reflections, and translations: 1. Lines are taken to lines, and line segments to line segments of the same length.
2. Angles are taken to angles of the same measure.
3. Parallel lines are taken to parallel lines.

[**MAFS.8.G.1.2**](http://www.cpalms.org/Public/PreviewStandard/Preview/5504) Calculator: NeutralUnderstand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.[**MAFS.8.G.1.3**](http://www.cpalms.org/Public/PreviewStandard/Preview/5505) Calculator: NeutralDescribe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.[**MAFS.8.G.1.4**](http://www.cpalms.org/Public/PreviewStandard/Preview/5506) Calculator: NeutralUnderstand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.[**MAFS.8.G.1.5**](http://www.cpalms.org/Public/PreviewStandard/Preview/5507) Calculator: YesUse informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angle created when parallel lines are cut by a traversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so. | **CMP3**BPWInv. 1 (Problems 1-4)Inv. 2 (Problems 1 & 2)Inv. 3 (Problems 1-3, & 5)Inv. 4 (Problems 1,3, & 4)**CPALMS Lessons:**8.G.1.1 **-** [Transformations - Rotation](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/11262)8.G.1.2 - [Triangles on a Lattice](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/124841)8.G.1.3 - [Translations](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/127638)8.G.1.4 - [Dilly Dallying with Dilations](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49913)8.G.1.5 - [Angle Relationships](http://www.cpalms.org/Public/PreviewResource/Preview/39484) | [**MATH ITEM SPECIFICATIONS**](http://fsassessments.org/wp-content/uploads/2015/03/Grade-8-Math-Test-Item-Specifications.pdf)**MFAS:***8.G.1.1*[Angle Transformations](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66721)[Parallel Line Transformation](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66724)[Segment Transformations](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66714)*8.G.1.2*[Multistep Congruence](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66741)[Proving Congruence](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66726)[Rigid Motion](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66727)*8.G.1.3*[Dilation Coordinates](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64604)[Reflection Coordinates](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64656)[Rotation Coordinates](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64655)[Translation Coordinates](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64654)*8.G.1.4*[Proving Similarity](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69403)[Similarity - 1](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69425)*8.G.1.5*[Justifying Angle Relationships](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70163)[Justifying the triangle sum](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70728)[Justifying the Exterior Angles](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70182) |
| **Weeks 4 - 8 (Q2)****11/7 - 12/9** | **Use functions to model relationships between quantities.**[**MAFS.8.F.2.5**](http://www.cpalms.org/Public/PreviewStandard/Preview/5502)Calculator: NeutralDescribe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.**Define, evaluate, and compare functions.**[**MAFS.8.F.1.1**](http://www.cpalms.org/Public/PreviewStandard/Preview/5498)  Calculator: YesUnderstand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.[**MAFS.8.F.1.3**](http://www.cpalms.org/Public/PreviewStandard/Preview/5500) Calculator: YesInterpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.  | **CMP3**TWMMInv. 1 (Problems 1-3)Inv. 4 (Problems 1-4)**CPALMS Lessons:**8.F.2.5 -[Are We There Yet?](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/48744)8.F.1.1 - [Functions with Vertical Line Test!](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/51141)8.F.1.3 - [Beginning Linear Functions](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/40867) | **MFAS:***8.F.2.5*[Jet Fuel](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64660)[Bacterial Growth Graph](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64664)[Graph the Ride](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64662)*8.F.1.1*[What is a Function?](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57732)**I**[dentifying Algebraic Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57845)[Recognizing Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57846)[Tabulating Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57848)*8.F.1.3*[Explaining Linear Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60550)[Linear or Nonlinear?](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60553)[Nonlinear Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60551)[What Am I?](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60546) |
| **Week 9 (Q2)****12/12 - 12/16** | **2nd 9 Week Review & Exams** |  |  |
| ***End of Second Nine Week Exam*** |
| ***Winter Break: December 19 - January 2*** |
| ***Professional Day*** |

**Third Nine Weeks!** [**(Unpacked Standards)**](https://drive.google.com/a/hcsb.k12.fl.us/folderview?id=0B2-WKQ2DKPVcRkpNZ1A2SHNFLUU&usp=sharing&tid=0B2-WKQ2DKPVcWnZES2JKQUlBZFE)

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| **Sequence** | **Standard Description** | **Resources** | **Assessment** |
| **Weeks 1 - 5 (Q3)****1/3 - 2/3** | **Define, evaluate, and compare functions.**[**MAFS.8.F.1.1**](http://www.cpalms.org/Public/PreviewStandard/Preview/5498)Calculator: YesUnderstand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.[**MAFS.8.F.1.2**](http://www.cpalms.org/Public/PreviewStandard/Preview/5499) Calculator: YesCompare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). [**MAFS.8.F.1.3**](http://www.cpalms.org/Public/PreviewStandard/Preview/5500) Calculator: YesInterpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. **Use functions to model relationships between quantities.**[**MAFS.8.F.2.4**](http://www.cpalms.org/Public/PreviewStandard/Preview/5501) Calculator: YesConstruct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.**Understand the connections between proportional relationships, lines, and linear equations.**[**MAFS.8.EE.2.5**](http://www.cpalms.org/Public/PreviewStandard/Preview/5494) Calculator: YesGraph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. [**MAFS.8.EE.2.6**](http://www.cpalms.org/Public/PreviewStandard/Preview/5495) Calculator: YesUse similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation y = mx for a line through the origin and the equation y = mx + b for a line intercepting the vertical axis at b.([Unpacked)](https://docs.google.com/document/d/1okKONlhceyoB60WTI0PxGN19tpMxlzg-oEz9guiOjZo/edit) | **CMP3**TWMMInv. 2 (Problems 1-5)Inv. 5 (Problems 1-3)**CPALMS Lessons:**8.F.1.1 - [Function or No Function?](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49409)8.F.1.2 -[The Linear Function Connection](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49314)8.F.1.3 - [Beginning Linear Functions](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/40867)8.F.2.4 - [Getting Graphic with Linear Functions](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/51216)8.F.2.5 - [Interpreting Distance-Time Graphs](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/37479) 8.EE.2.5 - [How Fast Can You Walk?](http://www.cpalms.org/Public/PreviewResourceUpload/Preview/22735)8.EE.2.6 - [Designing a Skateboard Kicker Ramp](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/48005) | [**MATH ITEM SPECIFICATIONS**](http://fsassessments.org/wp-content/uploads/2015/03/Grade-8-Math-Test-Item-Specifications.pdf)**MFAS***8.F.1.1*[What is a Function?](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57732)**I**[dentifying Algebraic Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57845)[Recognizing Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57846)[Tabulating Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57848)*8.F.1.2*[Competing Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57920)[Innovative Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57918)[Interpreting Distance-Time Graphs](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/32106)[Speed Reading](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/57919)*8.F.1.3*[Explaining Linear Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60550)[Linear or Nonlinear?](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60553)[Nonlinear Functions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60551)[What Am I?](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/60546)*8.F.2.4*[Construction Function](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64508)[Drain the Pool](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64603)[Smart TV](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64596)*8.EE.2.5*[Compare Slopes](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59187)[Interpreting Slope](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58624)[Proportional Paint](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58625)*8.EE.2.6*[Deriving Lines - 1](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66706)[Deriving Lines - 2](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66710)[Slope Triangles](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66702) |
| **Weeks 6-9 (Q3)****2/6- 3/3** | **Investigate patterns of association in bivariate data.**[**MAFS.8.SP.1.1**](http://www.cpalms.org/Public/PreviewStandard/Preview/5512) Calculator: NeutralConstruct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.[**MAFS.8.SP.1.2**](http://www.cpalms.org/Public/PreviewStandard/Preview/5513) Calculator: NeutralKnow that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.[**MAFS.8.SP.1.3**](http://www.cpalms.org/Public/PreviewStandard/Preview/5514) Calculator: NeutralUse the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. [**MAFS.8.SP.1.4**](http://www.cpalms.org/Public/PreviewStandard/Preview/5515)Calculator: YesUnderstand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. | 8.SP.1.1 [Guess the Celebrities’ Heights!](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47910)8.SP.1.2[Creating a Linear Model](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/71179)8.SP.1.3[Linear Statistical Models](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/71178)8.SP.1.4[Tackling 2 Way Tables](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/71656) | *8.SP.1.1*[Sleepy Statistics](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47910)[Infectious Statistics](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69265)[Population Density](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69284)*8.SP.1.2*[Line of Good Fit - 1](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66792)[Two Scatterplots](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66801)*8.SP.1.3*[Developmental Data](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69364)[Foot Length](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69361)[Stretching Statistics](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69377)*8.SP.1.4*[Music and Sports](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69380)[School Start Time](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66803)[Two-Way Relative](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/69381) |
| **Week 10 (Q3)****3/6 - 3/9** | **3rd 9 Week Review & Exams** |  |  |
| ***End Third Nine Week Exam*** |
| ***Professional Day*** |
| ***Spring Break: March 13-17*** |

**Fourth Nine Weeks! [(Unpacked Standards)](https://drive.google.com/a/hcsb.k12.fl.us/folderview?id=0B2-WKQ2DKPVcS2VjNkFOUnZmVzA&usp=sharing&tid=0B2-WKQ2DKPVcWnZES2JKQUlBZFE)**

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| **Sequence** | **Standard Description** | **Resources** | **Assessment** |
| **Weeks 1 - 3 (Q4)****3/20- 4/10** | **Work with radicals and integer exponents**[**MAFS.8.EE.1.1**](http://www.cpalms.org/Public/PreviewStandard/Preview/5490) Calculator: NoKnow and apply the properties of integer exponents to generate equivalent numerical expressions. [**MAFS.8.EE.1.3**](http://www.cpalms.org/Public/PreviewStandard/Preview/5492) Calculator: NoUse numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. [**MAFS.8.EE.1.4**](http://www.cpalms.org/Public/PreviewStandard/Preview/5493) Calculator: NoPerform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities.**Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.**[**MAFS.8.G.3.9**](http://www.cpalms.org/Public/PreviewStandard/Preview/5511)  Calculator: YesKnow the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.**Analyze and solve linear equations and pairs of simultaneous linear equations.** [**MAFS.8.EE.3.8**](http://www.cpalms.org/Public/PreviewStandard/Preview/5497)Calculator: YesAnalyze and solve pairs of simultaneous linear equations. 1. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.
2. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection.
3. Solve real-world and mathematical problems leading to two linear equations in two variables.

 | **CMP3**GGGInv. 1 (Problems 1-3)Inv. 5 (Problems 1-4)**CPALMS Lessons:**8.EE.1.1 -[Exponential Chips](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/51201)8.EE.1.3 & 1.4 - [Estimating Length Using Scientific Notation](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/32519)8.G.3.9 - [Volume Cylinder](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/11712)**CMP3**IITSInv. 1 (Problems 1-3)Inv. 2 (Problems 1-3)**CPALMS Lessons:**8.EE.3.8 **-** [A Scheme for Solving Systems](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/54390) | [**MATH ITEM SPECIFICATIONS**](http://fsassessments.org/wp-content/uploads/2015/03/Grade-8-Math-Test-Item-Specifications.pdf)**MFAS***8.EE.1.1*[Equivalent Power Expressions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58533)[Mult. and Div. Integer Exponents](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59695)[Negative Exponential Expressions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58531)*8.EE.1.3*[Compare Numbers](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55434)[Estimating Extreme Values](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55431)[Estimating Length Using Scientific Notation](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/32148)*8.EE.1.4*[Scientific Mult. and Div.](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62549)[Sums and Diff. in Scientific Notation](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62509)*8.G.3.9*[Cone Formula](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70911)[Cylinder Formula](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70924)*8.EE.3.8*[Identify the Solution](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59689)[Solving Real-Life Problem](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/32028)[System Solutions](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59693) |
| **Weeks 4 - 7(Q4)** **4/10-5/5** \*\* FSA Math Assessments will be scheduled sometime during  these weeks. | **To be covered AFTER FSA Math Test.****Perform arithmetic operations on polynomials**[**MAFS.912.A-APR.1.1**](http://www.cpalms.org/Public/PreviewStandard/Preview/5547) Calculator: NoUnderstand 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.**Analyze functions using different representations**[**MAFS.912.F-IF.3.7**](http://www.cpalms.org/Public/PreviewStandard/Preview/5576)Calculator: NeutralGraph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.1. Graph linear and quadratic functions and show intercepts, maxima, and minima.
 | **CMP3**FFPCInv. 1 (Problems 1-3)Inv. 2 (Problems 1, 2, & 4)**CPALMS Lessons:**912.A-APR.1.1 - [Manipulating Polynomials](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/32524)912.F-IF.3.7 - [Functions and Everyday Situations](http://www.cpalms.org/Public/PreviewResourceUrl/Preview/32452) | **MFAS***912.A-APR.1.1*[Add. Polynomials](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63905)[Mult. Polynomials](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63976)[Subtracting Polynomials](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63966)*912.F-IF.3.7*[Graphing a Linear Function](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66650)[Graphing a Quadratic Function](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/68827) |
| **Weeks 8 - 10 (Q4)****5/8  - 5/25** | **Build new functions from existing functions**[**MAFS.912.F-BF.2.3**](http://www.cpalms.org/Public/PreviewStandard/Preview/5581)Calculator: NeutralIdentify 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.* | **CMP3**FJInv. 1 (Problems 1-3)Inv. 3 (Problems 1-3)**CPALMS Lessons:**912.F-BF.2.3 **-** [Translating Quadratic Functions](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46400) | 912.F.BF.2.3[Comparing Functions - Linear](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62603)[Comparing Functions - Quadratic](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/68611) |
| ***End of Fourth Nine Weeks*** |
| ***End of School Year*** |