PLANNED INSTRUCTION

A PLANNED COURSE FOR:

Concepts of Algebra

Curriculum Writing Committee:
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Grade Level: 10

Date of Board Approval: _____

Course Weighting: Concepts of Algebra

Marking Period	Test	Constructed Response	Graded Classwork	Total Points
MP1 Points	100	20	80	200
MP2 Points	100	20	80	200
MP3 Points	100	20	80	200
MP4 Points	100	20	80	200
Total Points	400	80	320	800
Total Percentages	50%	10%	40%	

Curriculum Map

Overview:
This academic course provides a strong foundation in algebra for further study in science and mathematics. This course is designed to follow the Pre-Algebra course that covers the first three anchors of the PDE Keystone Exam: Numbers and Operations, Functions and Linear Equations/Inequalities. All content is aligned for students to be successful on the Algebra 1 Keystone exam. This course will cover the theoretical aspects of algebra and the applications to real world scenarios. Topics include operations and properties of real numbers, linear equations and inequalities, linear functions, systems of equations, properties of exponents, factoring quadratics, data analysis and probability, polynomial expressions, and simplifying square roots.

Time/Credit for the Course:

FULL YEAR, 1 CREDIT, 1 PERIOD/DAY

Goals:

Marking Period One 45 Days - Understanding of:

Unit 1: Probability, Data Analysis, and Scatter Plots with Line of Best Fit (45 days)

- Determining simple probabilities.
- Representing probability as a fraction, decimal and percent.
- Finding probabilities for independent and dependent events.
- Finding measures of central tendency (mean, median, mode).
- Identifying measures of spread: range and interquartile range.
- Constructing a box plot using the 5 number summary [finding quartiles].
- Interpreting categorical data: pie charts and bar graphs.
- Interpreting quantitative data: dot plots, histograms, and box plots.
- Interpreting scatterplots - identify a correlation, predict a value and follow a trend.
- Making a scatter plot and drawing the line of best fit.
- Writing the equation of the line of best fit by using point slope.
- Predicting a value using the line of best fit.
- Simplifying square roots

Marking Period Two 45 Days - Understanding of:

Unit 2: Polynomials, Linear Functions, and Slope (45 days)

- Properties of exponents. (Negative, zero, multiplication, division and power to power).
- Classifying polynomials by degree and number of terms.
- Add/Subtracting Polynomial expressions.
- Multiplying polynomial expressions.
- Factoring quadratics including GCF (where a = 1).
- Simplifying rational expressions by factoring.
- Finding the rate of change/slope from a table, graph, two points, or a word problem.
- Graphing linear functions using a table and/or intercepts.

Marking Period Three 45 Days - Understanding of:

Unit 3: Linear Equations and Inequalities (45 days)

- Graphing linear functions from slope intercept form and standard form.
- Converting equations from point slope form to slope intercept form.
- Writing equations in point slope or slope intercept form from real life applications
- Solving multi-step equations
- Solving linear inequalities: one step, two step, multi-step. Emphasis on special solutions.
- Constructing inequalities from real world applications and interpreting their solutions.
- Graphing inequalities on a number line. Writing inequalities from graphs.
- Solving compound inequalities and graphing their solutions on a number line.
- Constructing compound inequalities from real world applications and interpreting their solutions.

Marking Period Four 45 Days - Understanding of:

Unit 4: Systems of Linear Equations and Inequalities (45 days)

- Solving a system of linear equations by graphing.
- Solving a system of linear equations using substitution or elimination.
- Constructing a system of linear equations from a real-life application. Interpret its solution.
- Graphing a system of linear inequalities and interpreting its solution set.
- Constructing a system of linear inequalities from a real-life application. Interpret its solution set
- Operations with Radicals
- Solving absolute value equations and inequalities

Big Ideas:

BIG IDEA #1: Mathematical relationships among numbers can be represented, compared, and communicated.

BIG IDEA #2: Mathematical relationships can be represented as expressions, equations, and inequalities in mathematical situations.

BIG IDEA #3: Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.

BIG IDEA #4: Patterns exhibit relationships that can be extended, described, and generalized.

Textbook and Supplemental Resources:

Primary Textbook:

Name of Textbook: Reveal Algebra 1
Textbook ISBN #: 978-0-07695907-5
Textbook Publisher & Year of Publication: McGraw Hill 2020
Curriculum Textbook is utilized in: Algebra 1 and Concepts of Algebra

Supplemental Resources:

- **https://www.ixl.com/**
- **https://www.desmos.com**
- **https://www.deltamath.com/**
- **TI 84 Graphing calculator**
- Kuta Software (Pre-Algebra and Algebra versions)
- **https://quizizz.com**
- **https://Blooket.com**
- **https://Formative.com**

Curriculum Plan

UNIT 1: Probability, Data Analysis, and Scatter Plots with Line of Best Fit
Time Range in Days: 45 Days

Standards Addressed:

- CC.2.4.HS.B.1, Summarize, represent, and interpret data on a single count or measurement variable.
- CC.2.4.HS.B.3,Analyze linear models to make interpretations based on the data.
- CC.2.4.HS.B.5, Make inferences and justify conclusions based on sample surveys, experiments, and observational studies.
- CC.2.4.7.B.3, Investigate chance processes and develop, use, and evaluate probability models.
- CC.2.4.7.B.4, Recognize and evaluate random processes underlying statistical experiments.
- CC.2.4.7.B.7, Apply the rules of probability to compute probabilities of compound events in a uniform probability model.
- CC.2.1.8.E.1, Distinguish between rational and irrational numbers using their properties.
- CC.2.1.8.E.4, Estimate irrational numbers by comparing them to rational numbers.
- CC.2.1.8.F.1, Apply and extend the properties of exponents to solve problems with rational exponents.
- CC.2.1.8.F2, Apply properties of rational and irrational numbers to solve real-world or mathematical problems.

Anchors Addressed

- A1.2.3.1, Use measures of dispersion to describe a set of data.
- A1.2.3.2, Use data displays in problem solving settings and/or to make predictions.
- A1.2.3.3, Apply probability to practical situations.
- A1.1.1.1, Represent and/or use numbers in equivalent forms (e.g., integers, fractions, decimals, percents, square roots, and exponents).
- A1.1.1.2 Apply number theory concepts to show relationships between real numbers in problem solving settings.

Eligible Content:

- Find probabilities for compound events (e.g., find probability of red and blue, find probability of red or blue) and represent as a fraction, decimal, or percent.
- Analyze data, make predictions, and/or answer questions based on displayed data (box-and whisker plots, stem-and-leaf plots, scatter plots, measures of central tendency, or other representations
- Analyze a set of data for the existence of a pattern and represent the pattern algebraically and/or graphically.

- Calculate and/or interpret the range, quartiles, and interquartile range of data.
- Estimate or calculate to make predictions based on a circle, line, bar graph, measure of central tendency, or other representation.
- Draw the line of best fit.
- Make predictions using the line of best fit.
- Simplify square roots (with and without coefficients)

Objectives:

1. Students will be able to make and interpret categorical charts (pie and bar graphs). (DOK - Level Two)
2. Students will be able to make and interpret frequency tables and histograms. (DOK – Level Two)
3. Students will be able to determine the mean, median, mode, and range. (DOK – Level One)
4. Students will be able to create and interpret box-and-whisker plots as well as find quartiles and percentiles. (DOK – Level Three)
5. Students will be able to estimate or calculate to make predictions based on charts, graphs and other representations. (DOK – Level Three)
6. Students will be able to write an equation of a trend line and line of best fit as well as use the trend line or line of best fit to make predictions. (DOK – Level Four)
7. Students will be able to calculate simple probabilities. (DOK – Level Two)
8. Students will be able to find the probability of mutually exclusive and compound events as well as independent and dependent events. (DOK – Level Two)
9. Students will be able to simplify radical expressions with and without a coefficient. (DOK – Level Two)

Core Activities and Corresponding Instructional Methods:

- Review students' knowledge of representing real numbers in forms of decimal, percentages, and fractions.
    - Suggested Practice: *Keystone Coach: Algebra 1 Booklet* Chapter 1 - Lesson 1
    - IXL Extension Assignments: A-3
    - Teacher made assignments, online worksheets
    - Blooket, Kahoot, Quizizz Practice for independent or class activities

- Students will review and expand their understanding about data and terminology associated with data analysis and probability by reviewing box and whisker, circle graphs, stem and leaf graphs, scatter plots, bar graphs and independent and dependent events.
    - Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapter 12 & 5 Sections: 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 5.3, 5.5
        - Diagnostic assessment, questioning
        - Cooperative Learning Groups

        - Direct Instruction as needed using Smart Technology
    - Suggested Practice*: Keystone Coach: Algebra 1 Booklet* Chapters 4 & 5 - Lessons: 21, 22, 23, 24, 25
        - Chapter Review Test
        - Constructed Response Review
    - IXL Extension Assignments: KK-1, KK-2, KK-5, KK-6, KK-7, HH-1, HH-2, HH-6, HH-7, HH-8, HH-9
    - Online worksheets with Guided Practice
    - White board practice with group activities and in-class games (examples of visuals teaching approach: roll a die, spin a spinner, pull markers out of bin, take a ticket from a bag for probability, make a human graph, pull data from students [i.e. how many pets does each student have], and use data to draw students of a visual to relate to everyday use)
    - Blooket, Kahoot, Quizizz Practice for independent or class activities

- Develop students' knowledge of radicals and how to simplify them with and without coefficients.
    - Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapter 8 - Lesson 8.5, 8.6
        - Diagnostic assessment, questioning
        - Cooperative Learning Groups
        - Direct Instruction as needed using Smart Technology
    - Suggested Practice*: Keystone Coach: Algebra 1 Booklet* Chapter 1 - Lesson 2
    - IXL Extension Assignments: EE-1
    - Online worksheets with Guided Practice
    - Blooket, Kahoot, Quizizz Practice for independent or class activities

Assessments:

Diagnostic:

- Teacher prepared diagnostic test, teacher questioning and observation
- CDT or Firefly Benchmark Exam from PDE

Formative:

- Teacher observations, questioning techniques
- Group activities and classwork
- Teacher prepared Quizzes
- Weekly Constructed Response Questions modeled from Keystone Samplers provide on PDE for Algebra

Summative:

- Common Assessments Topic One (Probabilities and Data Analysis)
- Common Assessment Topic 2 - Radicals and Exponents

UNIT 2: Polynomials, Linear Functions and Slope
Time Range in Days: 45 Days

Standards Addressed:

- CC.2.1.HS.F.1, Apply and extend the properties of exponents to solve problems with rational exponents
- CC.2.1.HS.F.2, Apply properties of rational and irrational numbers to solve real-world or mathematical problems.
- CC.2.2.8.B.1, Apply concepts of radicals and integer exponents to generate equivalent expressions.
- CC.2.1.6.E.3, Develop and/or apply number theory concepts to find common factors and multiples.
- CC.2.2.HS.D.1, Interpret the structure of expressions to represent a quantity in terms of its context.
- CC.2.2.HS.D.2, Write expressions in equivalent forms to solve problems.
- CC.2.2.HS.D.3, Extend the knowledge of arithmetic operations and apply to polynomials.
- CC.2.2.HS.D.5, Use polynomial identities to solve problems.
- CC.2.2.HS.D.6, Extend the knowledge of rational functions to rewrite in equivalent forms.
- CC.2.1.HS.F.3, Apply quantitative reasoning to choose and interpret units and scales in formulas, graphs, and data displays.
- CC.2.1.HS.F.4, Use units as a way to understand problems and to guide the solution of multi-step problems.
- CC.2.1.HS.F.5, Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
- CC.2.2.8.B.3, Analyze and solve linear equations and pairs of simultaneous linear equations.
- CC.2.2.8.C.1 Define, evaluate, and compare functions.

Anchors Addressed:

- A1.1.1.3, Use exponents, roots, and/or absolute values to solve problems
- A1.1.1.2. Apply number theory concepts to show relationships between real numbers in problem solving settings.
- A1.1.1.5. Simplify expressions involving polynomials.
- A1.1.2.1, Write, solve, and/or graph linear equations using various methods.
- A1.2.2.1, Describe, compute, and/or use the rate of change (slope) of a line

Eligible Content:

- Apply and extend the properties of exponents (negative, positive and zero)
- Simplify/evaluate expressions involving properties/laws of exponents.
- Add, subtract, and/or multiply polynomial expressions (express answers in simplest form).

- Find the Greatest Common Factor (GCF) and/or the Least Common Multiple (LCM) for sets of monomials.
- Factor algebraic expressions, including difference of squares and trinomials.
- Find the rate of change(slope) of linear functions from tables, graphs, equations, two points.
- Identify, describe, and/or use constant rates of change.
- Determine the slope and/or y-intercept represented by a linear equation or graph.
- Apply the concept of linear rate of change (slope) to solve problems.
- Write a linear function in a variety of different scenarios including real life application.
- Use line equations to make predictions about real world situations.
- Write, solve, graph, and interpret linear equations to model relationships between quantities.

Objectives:

1. Students will be able to simplify expressions involving zero and negative exponents (integer values from -10 to 0). (DOK – Level Two)
2. Students will understand and apply properties of exponents (integer values from -10 to 10 only). (DOK – Level Two) Students will be able to classify, add and subtract polynomials. (DOK – Level Two)
3. Students will be able to multiply monomials and binomials, two binomials or a binomial by a trinomial. (DOK – Level Two)
4. Students will be able to factor trinomials, including those with a GCF. (DOK – Level Two)
5. Students will be able to simplify rational expressions using factoring. (DOK - Level Two)
6. Students will be able to find rates of change from tables; they will be able to calculate slope. They will also compare the slopes of parallel lines. (DOK – Level Two)
7. Students will be able to graph linear equations from point slope, slope intercept and standard form.

Core Activities and Corresponding Instructional Methods:

- Discover and understand exponential properties and laws while being able to evaluate exponential expressions.
    - Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapter 8 - Lessons: 8.1, 8.2, 8.3
        - Diagnostic assessment, questioning
        - Cooperative Learning Groups
        - Direct Instruction as needed using Smart Technology
        - Online worksheets
    - IXL Extension Assignments: R-1, R-2, R-3, R-4, R-5, R-6, R-7, R-8, R-9, R-10, R-11, R-12
    - Teacher made notes and examples
    - Blooket, Kahoot, Quizizz Practice for independent or class activities

- Evaluate and classify polynomial expressions while expanding on their knowledge of LCM (least common multiple) and GCF (greatest common factor) of monomials, binomials, and trinomials.
    - Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapter 10 - Lessons 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7
        - Diagnostic assessment, questioning
        - Cooperative Learning Groups
        - Direct Instruction as needed using Smart Technology
        - Online worksheets
    - Suggested Practice*: Keystone Coach: Algebra 1 Booklet* Chapter 1 - Lesson 3, 4, 6,7 & 8.
    - IXL Extension Assignments: W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8, W-9, W-10, W-11, W-12, W-13, W-14
    - Teacher made notes and examples
    - Blooket, Kahoot, Quizizz Practice for independent or class activities

- Using graphs, charts, and real-world examples, students will be introduced to linear functions, slope-formulas, and rate of change.
    - Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapters 3, 4, & 5 - Lessons: 3.1, 3.2, 4.1, 4.2, 4.3, 5.1.
        - Diagnostic assessment, questioning
        - Cooperative Learning Groups
        - Direct Instruction as needed using Smart Technology
        - Online worksheets
    - Suggested Practice*: Keystone Coach: Algebra 1 Booklet* Chapter 2 - Lesson 9, Chapter 3 - Lesson 13, 15, & 17, Chapter 4 - Lessons 18, 19, 20, & 21.
    - IXL Extension Assignments: N-1, N-2, N-2, N-4, N-5, N-6, N-7, N-8, N-9, N-10, C-1, C-2, C-3, C-4, C-5, C-6,C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C,15, C-16, C-17, K-1, K-2, K-3, K-4.L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8,L-9, L-10, L-11, L-12, L-13, L-14, L-15, L-16, L-17, L-18
    - Teacher made notes and examples
    - Blooket, Kahoot, Quizizz Practice for independent or class activities

Assessments:

Diagnostic:

- Teacher prepared diagnostic test, teacher questioning and observation
- CDT or Firefly Benchmark Exam from PDE

Formative:

- Teacher observations, questioning techniques
- Group activities and classwork
- Teacher prepared Quizzes

- Weekly Constructed Response Questions modeled from Keystone Samplers provide on PDE for Algebra

Summative:

- Topic 3 - Operations with Polynomials
- Topic 4 - Factoring Polynomials

UNIT 3: Linear Equations and Inequalities
Time Range in Days: 45

Standards:

- CC.2.1.HS.F.3, Apply quantitative reasoning to choose and interpret units and scales in formulas, graphs, and data displays.
- CC.2.2.8.B.3, Analyze and solve linear equations and pairs of simultaneous linear equations.
- CC.2.2.HS.D.7, Create and graph equations or inequalities to describe numbers or relationships
- CC.2.2.HS.D.8, Apply inverse operations to solve equations or formulas for a given variable.
- CC.2.1.HS.F.5, Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
- CC.2.2.HS.D.9, Use reasoning to solve equations and justify the solution method.
- CC.2.2.HS.D.10, Represent, solve, and interpret equations/inequalities and systems of equations/inequalities algebraically and graphically.
- CC.2.2.HS.C.2, Graph and analyze functions and use their properties to make connections between the different
- CC.2.2.HS.C.5 Construct and compare linear, quadratic, and exponential models to solve problems.

Anchors Addressed:

- A1.1.2.1, Write, solve, and/or graph linear equations using various methods.
- A1.1.3.1, Write, solve, and/or graph linear inequalities using various methods.
- A1.2.2.1, Analyze and/or use patterns or relations.

Eligible Content:

- Write or identify a linear equation when given the graph of the line, two points on the line, or the slope and a point on the line. (Linear equations may be in point-slope, standard, and/or slope-intercept form)
- Write, solve, graph, and interpret linear equations to model relationships between quantities
- Interpret solutions to problems in the context of the problem situation. (linear equations only)
- Identify or graph the solution set to a linear inequality on a number line.
- Write, solve, graph, and interpret inequalities to model relationships between quantities.
- Write or solve compound inequalities and/or graph their solution sets on a number line (may include absolute value inequalities).

- Interpret solutions to problems in the context of the problem situation (limit to linear inequalities).

Objectives:

1. Students will be able to write and graph linear equations in slope-intercept form, point-slope form, and standard form. (DOK – Level Two)
2. Students will be able to use linear equations in real world situations to solve problems for an unknown quantity. Students will be able to understand the solution to an equation as it relates to a real-world situation. (DOK- Level Four)
3. Students will be able to solve equations (multi-step in one variable which includes equations with variables on both sides, identities and equations with no solution). (DOK – Level Two)
4. Students will be able to reason and critique what a solution represents in context. (DOK - Level Three)
5. Students will be able to create equations based on real world situations. (DOK – Level Four)
6. Students will be able to represent mathematical relationships using graphs, coordinates, or tables. (DOK – Level Two)
7. Students will be able to identify and represent patterns that describe linear functions. (DOK – Level Two)
8. Students will be able to write, graph, and identify solutions of inequalities. (DOK – Level Two)
9. Students will be able to solve inequalities, compound inequalities, and absolute value equations and inequalities. (DOK – Level One and Two)
10. Students will be able to critique the solutions to inequalities and justify their responses. (DOK - Level Four)

Core Activities and Corresponding Instructional Methods:

- While using their knowledge of operations and properties of real numbers, students will write and solve linear equations, inequalities, and linear inequalities.
    - Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapters 2,4, & 6 - Lessons: 2.2, 2.3, 2.4, 4.1,6.1, 6.2, 6.3, 6.4
        - Diagnostic assessment, questioning
        - Cooperative Learning Groups
        - Direct Instruction as needed using Smart Technology
        - Online worksheets
    - Suggested Practice: *Keystone Coach: Algebra 1 Booklet* Chapter 2 - Lesson 11, Chapter 3 - Lesson 16, & Chapter 4 - Lesson 20
    - IXL Extension Assignments: P-1, P-2, P-3, P-4, P-5, P-6, P-7, F-1, F-2, F-3, F-4, F-5, F-6, F-7, F-8, F-9, F-10, F-11, F-12, F-13, F-14, F-15
    - Teacher made notes and examples
    - Blooket, Kahoot, Quizizz Practice for independent or class activities

Assessments:

Diagnostic:

- Teacher prepared diagnostic test, teacher questioning and observation
- CDT or Firefly Benchmark Exam from PDE

Formative:

- Teacher observations, questioning techniques
- Group activities and classwork
- Teacher prepared Quizzes
- Weekly Constructed Response Questions modeled from Keystone Samplers provide on PDE for Algebra

Summative:

- Common Assessment on Linear Functions (Equations)
- Common Assessment on Linear Inequalities

UNIT 4: Systems of Linear Equations and Inequalities
Time Range in Days: 45 Days

Standards Addressed:

- CC.2.2.8.B.3, Analyze and solve linear equations and pairs of simultaneous linear equations.
- CC.2.1.HS.F.5, Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
- CC.2.2.HS.D.7, Create and graph equations or inequalities to describe numbers or relationships.
- CC.2.2.HS.D.10 Represent, solve, and interpret equations/inequalities and systems of equations/inequalities algebraically and graphically.

Anchors Addressed:

- A1.1.2.2, Write, solve, and/or graph systems of linear equations using various methods
- A1.1.3.2, Write, solve, and/or graph systems of linear inequalities using various methods

Eligible Content:

- Write, solve and/or graph systems of linear equations using various methods.
- Write and/or solve a system of linear equations (including problem situations) using graphing, substitution and/or elimination (limit systems to 2 linear equations). Apply and extend the properties of exponents [negative, positive and zero].

- Interpret solutions to problems in the context of the problem situation (systems of 2 linear equations only).
- Write and/or solve a system of linear inequalities using graphing (limit systems to 2 linear inequalities.
- Interpret solutions to problems in the context of the problem situation (systems of 2 linear inequalities only).
- Simplify/reduce a rational algebraic expression by factoring.
- Apply operations with radical expressions.

Objectives:

1. Students will learn to solve a system of equations by graphing or by using substitution or elimination methods. (DOK – Level One)
2. Students will review and practice the graphing techniques for linear functions taught in Pre-Algebra and extend the concept to systems of linear equations and inequalities. Solution techniques include graphing, substitution, and elimination. Emphasis is placed on the solution of a system being the intersection of two lines or planar regions. (DOK – Level One)
3. Students will graph two lines on the same coordinate grid to find the point of intersection. (DOK – Level Two)
4. Students will apply the substitution or elimination method to solve a system. (DOK – Level Two)
5. Students will compare each method and determine which method for solving a system of equations is most efficient. (DOK – Level Three)
6. Students will analyze whether a system has a unique solution, no solutions, or infinitely many solutions. (DOK – Level Two)
7. Students will find solutions to real-world systems of linear equations and inequalities. (DOK – Level Two)
8. Students will design real-world problems that utilize systems of linear equations and inequalities. (DOK – Level Four)
9. Students will solve a system of inequalities by recalling prior knowledge from prior lessons and apply their new knowledge to some real-world linear programming-type situations. (DOK – Level One)
10. Students will design real-world problems that utilize systems of linear inequalities. (DOK – Level Four)
11. Students will be able to add, subtract, multiply, and divide radical expressions. (DOK – Level Two)

Core Activities and Corresponding Instructional Methods:

- Using prior knowledge of linear equations, students will apply methods of solving systems of linear equations.

- Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapter 7 - Lessons: 7.1, 7.2, 7.3, 7.4
    - Diagnostic assessment, questioning
    - Cooperative Learning Groups
    - Direct Instruction as needed using Smart Technology
    - Online worksheets
- Suggested Practice: *Keystone Coach: Algebra 1 Booklet* Chapter 2 - Lesson 10, Lesson 11
- IXL Extension Assignments: O-1, O-2, O-3, O-4, O-5, O-6, O-7, O-8, O-9, O-10, O-11, O-12, O-13, O-14, O-15
- Teacher made notes and examples
- Blooket, Kahoot, Quizizz Practice for independent or class activities

- Using previously learned material on systems of linear equations, students will apply methods to solve systems of linear inequalities.
    - Suggested Practice: Algebra Textbook: *McGraw Hill Reval-Algebra 1* Chapter 7 Lesson 7.5
        - Diagnostic assessment, questioning
        - Cooperative Learning Groups
        - Direct Instruction as needed using Smart Technology
        - Online worksheets
    - Suggested Practice: *Keystone Coach: Algebra 1 Booklet* Chapter 2 - Lesson 12
    - IXL Extension Assignments: P-7 & P-8
    - Teacher made notes and examples
    - Blooket, Kahoot, Quizizz Practice for independent or class activitie

Assessments:

Diagnostic:

- Teacher prepared diagnostic test, teacher questioning and observation
- CDT or Firefly Benchmark Exam from PDE

Formative:

- Teacher observations, questioning techniques
- Group activities and classwork
- Teacher prepared Quizzes
- Weekly Constructed Response Questions modeled from Keystone Samplers provide on PDE for Algebra

Summative:

- Common Assessment on System of Linear Equations
- Common Assessment on System of Linear Inequalities