## Standards/Learning Targets

## A-REI3,

I can solve a system of linear equations by graphing

I can solve a system of linear equations by substitution method

I can solve a system of linear equations by elimination method

I can set up and solve real world problems using systems of equations

I can graph the solution to a linear inequality and system of linear equalities
N.Q. 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. 2 Define appropriate quantities for the purpose of descriptive modeling.
N.Q. 3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities
A.SSE. 1 Interpret expressions that represent a quantity in terms of its context
a. Interpret parts of an expression, such as terms, factors, and coefficients.
b. 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.CED. 1 Create equations and inequalities in one variable and use them to solve problems. Include

## Formative Assessments / Activities / Strategies /

## Unit Resources

Formative Assessments:
Reteach whole group

- Pull few students aside to reteach while others work on an enrichment activity
- itutoring video or similar video lesson
- Watch videos created by other algebra teachers
- Quiz Retakes
- Peer Tutoring
- Possibilities:
- Edpuzzle
- Leveled Solving by Substitution Activity
- Scavenger Hunt Elimination Method
- Whiteboard practice
- Clue Murder Mystery
- Dry Erase Word Problems - spend a day just setting up the word problems and a second day solving
- Word Problems Matching
- Organize work using T-chart/Graphic organizer
- Notes - reference
- http://www.sosmath.com/soe/SE/SE.html
http://www.math-play.com/System-of--Equa tions-Game.html

FAL - http://map.mathshell.org/lessons.php FAL - Solving Linear Equations in Two Variables FAL - Representing Inequalities Graphically

Socrative, kuta, Quality Core question bank, ExamView, itutoring.com, pinterest, youtube, doceri app, activ studio

## Summative Assessment(s)

## Vocabulary

- Systems of Linear Equations
- Solution Set to a system of linear inequalities
- Constraints
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. 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.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.
A.REI. 2 Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.
A.REI. 3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters
A.REI. 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. 6 Solve systems of linear equations exactly and approximately focusing on pairs of linear equations in two variables.
A.REI. 7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.

Mathematical Practices

1. Make sense of problems and
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in
repeated reasoning.

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