

Week Plan - Nov 4-8 Algebra 1 B

Monday -

- Warmup with solving for y on #3-6 of the first equation in each set pg. 83 in soft practice book.
- Review Worksheet from Thursday on Graphing method questions
- Discuss the problems with graphing as a system of linear equations to find solution such as no graphing calculator nor graph paper OR can not seem to find an exact answer or any answer. This leads to the need for another method.
- Notes on Substitution method - use problems but extra note paper for problems off pg 83.

Tuesday -

- Warmup - problems from pg. 81 soft practice book. - Focus on #9&10 word problems setup together.
- More practice on solving for one or both equations for y and doing substitution method.
- Do this slide's application problems from example dynamic classroom - show video of method used
- Note this method like others can still have error so check work with another method.

Wednesday -

- Kuta Day - use handout and work in small groups on solving problems for the first 30 minutes of class then
- Use the links on google classroom to review answers and prepare questions for Mrs. Pletcher tomorrow

Thursday -

- Warmup with pg 82 # 12 as a single equation and pg 84 # 11 setting up word problems again for a system.
- Complete pg 83 problems and kuta worksheet problems.

FRIDAY - Quiz on graphing method and substitution method.

Chapter 5: Keystone Objective

ASSESSMENT ANCHOR		
A1.1.2 Linear Equations		
Anchor Descriptor	Eligible Content	PA Core Standards
A1.1.2.2 Write, solve, and/or graph systems of linear equations using various methods.	A1.1.2.2.1 Write and/or solve a system of linear equations (including problem situations) using graphing, substitution, and/or elimination. <u>Note:</u> Limit systems to two linear equations.	CC.2.1.HS.F.5 CC.2.2.8.B.3 CC.2.2.HS.D.7 CC.2.2.HS.D.9 CC.2.2.HS.D.10
	A1.1.2.2.2 Interpret solutions to problems in the context of the problem situation. <u>Note:</u> Limit systems to two linear equations.	

Week Objective from textbook sections 5.2

Section 5.2: Solving Systems of Linear Equations by Substitution

Common Core State Standards: A.CED.A.3, A.REI.C.6

Learning Target: Solve linear systems by substitution.

Success Criteria

- Solve a system of linear equations by substitution.
- Solve a linear equation in two variables for either variable.
- Solve real-life problems using substitution.

$$y = 2x + 5$$

Equation 1

$$y = 3x - 1$$

Equation 2

$$2x + 5 = 3x - 1$$

$$6 = x$$

The solution is $(6, 17)$.

$$y = 2(6) + 5$$

$$y = 17$$

Application --- Scenario with 2 constraints and 2 variables

A comedy club earns \$1088 from an opening night performance and \$1183 from a second performance. On opening night, the club sells 68 adult tickets and 136 student tickets. For the second performance, the club sells 79 adult tickets and 140 student tickets. What is the price of each type of ticket?



System

$$68x + 136y = 1088$$

Equation 1 (first performance)

$$79x + 140y = 1183$$

Equation 2 (second performance)

- ▶ The solution is $(7, 4.5)$. So, an adult ticket costs \$7 and a student ticket costs \$4.50.