

A. Lesson Context

BIG PICTURE of this UNIT:	<ul style="list-style-type: none"> • What is meant by the term FUNCTIONS and how do we work with them? • mastery with working with basics & applications of linear functions • mastery with working with basics & applications of linear systems • understanding basics of function concepts and apply them to lines & linear systems 		
CONTEXT of this LESSON:	<p>Where we've been</p> <p>In Lesson 9, you practiced with writing equations to various word problems</p>	<p>Where we are</p> <p>Writing equations for problems involving 2 unknowns & using algebraic methods for solving systems</p>	<p>Where we are heading</p> <p>How do we apply the concept of "functions" to linear relations.</p>

B. Lesson Objectives

- a. Write pairs of equations to model real world scenarios involving two unknowns.
- b. Reviewing algebraic methods for solving simultaneous linear equations (elimination & substitution)

C. Fast Five:

Use the substitution method to solve for x & y in this system: $L_1: 2x - 4y = 20$ and $L_2: -2y = 9 + 2x$.

Use the elimination method to solve for x & y in this system: $L_1: -3x + 4y = 21$ and $L_2: 5x + 8y = -2$.

D. Equation Writing: Speed Dating Activity

You will be given one word problem card. Your task is to:

- a. Define variables that should be used to define your unknowns
- b. Write two equations that should be used to model your word problem.
- c. Then, using our "Speed Dating" format, you will sit across from your partner, exchange cards & then you will have 3 minutes to write the 2 new equations for your partners problem. After 3 minutes, you will rotate to meet your new partner & repeat the process of exchanging cards & writing new equations for the new problem.

Record your Problem #, your definitions of variables & your two equations on the following table:

