

PROBLEM-OF-THE-DAY: ALGEBRA 1

WEEK: February 25 to February 29

Day: Thursday

RISD Objective: Provided a system of equations or a word problem which can be modeled by a system, students will solve the problem graphically, or by using substitution, or by using elimination.

PROBLEM #112

A system of equations is set up to determine how many ounces of red chili and how many ounces of green chili were mixed together to make a blend of salsa. The total mixture was 32 ounces of salsa. Give three possible solutions to this system and one solution that is NOT possible. Explain why your non-solution is not possible.

MODEL SOLUTION #112

(16, 16); (10, 22); (8, 24) **Examples of possible solutions**

The first coordinate of the ordered pair is the number of ounces of red chili and the second coordinate of the ordered pair is the number of ounces of green chili. So, all we have to do to see if the ordered pair is a good solution is add both coordinates of that particular ordered pair and see if the sum is equal to 32.

(48, -16); (-20, 52) **Examples of NOT possible solutions.**
Reason: a negative weight is impossible.