Investigating Systems of Equations

On Monday, you go to the candy store and buy 1 pound of gummy bears and 2 pounds of jujubes for \$2.00. On Tuesday, you go back to buy 4 pounds of sours and 1 pound of gummy bears, which came to \$3.00. Then, on Wednesday, you bought 3 pounds of mints, 1 pound of gummy bears and 1 pound of sours for \$1.50. How much would you end up paying on your next trip to the candy store if you bought 1 pound of each of the 4 kinds of candy?

Consider the following questions:

- 1) How many unknowns are in this problem? State them and assign a variable to represent each unknown.
- 2) Using the information provided in the scenario above, write appropriate equations using the variables you chose.
- 3) Compare the number of unknowns to the number of equations you had to write. What do you notice?
- 4) What is the scenario asking you to find? Express this in both words and with a mathematical equation.
- 5) Solve the problem using whatever means you have. Note: There are multiple ways to solve this problem, but only one correct answer. Be prepared to share your solution.