Sara Karst (Class of 2012) noticed that there weren't any BONUS points available on this quiz. This activity will allow you to earn BONUS points by creating (and solving) a BONUS problem on your own!

Quiz 3.5-3.7 has problems where you must solve for three variables in three equations. Sara thought a good BONUS problem would require students to solve for <u>four</u> variables in <u>four</u> equations! That's what you will do in this activity.

Step 1- Choose your four variables: ___ ___ ___ ___

Step 2- Determine the solution to the problem: (____ , ____ , ____ , ____)

Step 3- Make up the left sides of four equations $(-3w + x + 8y - 6z = ???)$.

Step 4- Plug in your solutions from Step 2 to calculate what the right sides of each equation should be.

Step 5- Write your problem here (the four equations with four variables)

Step 6- Now you must use algebra to solve your problem! You will need to use substitution and/or linear combination (dropout) to do this. Attach additional paper, if necessary.