

Name: _____

Word Problems: (Set B)

*****Do all work in your notebook or binder. Calculators okay to use.*****

For each problem:

- **Define the variables**
- **Write two equations for a system of equations**
- **Solve by using the elimination OR substitution method.**

1. One customer purchases 8 bags of cat food and 2 bags of dog food. The total weight of the purchase is 44 pounds. Another customer purchases 5 bags of cat food and 2 bags of dog food. The total weight of the purchase is 35 pounds. How much does a bag of cat food weigh? How much does a bag of dog food weigh?

2. You purchase 5 pounds of apples and 2 pounds of oranges for \$9. Your friend purchases 5 pounds of apples and 6 pounds of oranges for \$17. What is the price per pound for oranges? What is the price per pound for apples?

3. A 100-point test contains a total of 20 questions. The multiple choice questions are worth 3 points each and the short response questions are worth 8 points each.
 - a. How many short response questions are on the test? How many multiple choice questions are on the test?
 - b. If the teacher changed the test to 15 questions, then how many of each type of question would be on the test?

4. The local theater is showing a matinee and offering a special deal for the community. A ticket for an adult costs \$11 and a ticket for a child costs \$6. The theater sells a total of 60 tickets and collects \$460. How many adult tickets and children tickets are sold?

5. You and your friend are selling magazine subscriptions. You sell 8 fewer magazine subscriptions than your friend. Together you sell 42 magazine subscriptions. How many magazine subscriptions did you sell?

6. Three pens and two notebooks cost \$8.25. Two pens and three notebooks cost \$8.00. Find the cost of each item.

7. Daniel and Liam had just \$5 to spend for a snack. They could buy 2 hamburgers and 1 soda with no change back or 1 hamburger and 2 sodas with 40 cents change back. How much is a soda?