Unit 2 2.10

Systems of Equations Word Problems Practice

<u>Objective:</u> 1) Write a system of equations for each scenario.

2) Solve each system by graphing, substitution, or elimination.

 Mr. Belby got into a car accident while driving back from a Macklemore concert. He needs to get a rental car so that he can get to school on Monday. He's trying to choose between two companies, Mose's Mazda's and Holly's Hondas. Mose's charges a \$25 rental fee plus \$0.50 per mile driven. Holly's charges a \$30 rental fee plus \$0.30 per mile driven. After how many miles will the two companies cost the same amount? What will the cost be?

2. There are 13 animals in Mr. Tolle's barn. Some are chickens and some are pigs. There are 40 legs in all. How many of each animal are there?

3. For dinner, Mrs. Wheeler had 10 chicken McNuggets and a medium fry for 840 calories. Mr. Hoffman had 6 chicken McNuggets and two medium fries for 1036 calories. How many calories are there in each item?

4. Mrs. Pischke is thinking of two numbers. The second number is 8 less than 3 times the first number. Three times the first number minus twice the second number is 10. Find the two numbers.