Algebra II Class Worksheet #5 Unit 2 page 1 ____

Solve each of the problems algebraically. Use a system of 2 equations with 2 variables.

1. Donna and Mike receive a total of \$275. The amount received by Donna is \$10 more than four times the amount received by Mike. How much did each person receive?

2. Peter invests \$400, part at 4% per year and the rest at 6.5% per year. If the total interest for one year was \$24, then how much did he invest at each rate?

3. A collection of ordinary dimes and nickels is worth a total of \$10. If the number of dimes is five less than twice the number of nickels, then how many coins of each type are in the collection?

Algebra II Class Worksheet #5 Unit 2 page 2

Solve each of the problems algebraically. Use a system of 2 equations with 2 variables.

4. Coffee worth 80 cents per pound is mixed with coffee worth \$1.10 per pound to produce a 50 pound blend worth 89 cents per pound. How much of each type of coffee is used?

5. Six hot dogs and 4 sodas cost \$6.70. Five hot dogs and 7 sodas cost \$7.60. What is the cost of each item?

6. A chemist has one solution which is 20% acid and another solution which is 70% acid. How many milliliters of each should she use to make 60 ml of a solution which is 35% acid?