General Algebra 2 Worksheet #6 Unit 3 page 1

Write a system of **two equations** with **two variables** and solve each of the following problems. Show your **complete** solution **neatly organized**.

1. The sum of two numbers is 5. The first number is six less than three times the second. What are the numbers?

2. The sum of two numbers is 100. The first number is two less than five times the second. What are the numbers?

3. The sum of two numbers is 5. The first number is one more than three times the second. What are the numbers?

4. Coffee worth 80ϕ per pound is mixed with coffee worth 50ϕ per pound to produce a twenty pound blend worth 68ϕ per pound. How many pounds of each type of coffee is used?

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Write a system of **two equations** with **two variables** and solve each of the following problems. Show your **complete** solution **neatly organized**.

5. Coffee worth 1.50 per pound is mixed with coffee worth 90ϕ per pound to produce a fifty pound blend worth a total of 54. How many pounds of each type of coffee is used?

6. Coffee worth \$1.20 per pound is mixed with coffee worth \$1.80 per pound to produce a ten pound blend worth \$1.59 per pound. How many pounds of each type of coffee is used?

7. Coffee worth \$3 per pound is mixed with coffee worth \$1.25 per pound to produce a ten pound blend worth \$2.44 per pound. How many pounds of each type of coffee is used?

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Write a system of **two equations** with **two variables** and solve each of the following problems. Show your **complete** solution **neatly organized**.

8. A collection of ordinary dimes and nickels is worth \$6.65. The number of nickels is seven less than two times the number of dimes. How many coins of each type are in the collection?

9. A collection of fifty ordinary dimes and quarters is worth a total of \$10.55. How many coins of each type are in the collection?

10. \$5000 is to be divided between two people so that one receives \$500 more than twice what the other receives. How much will each person receive?