Solve each of the following problems algebraically (one variable solution). Show your work neatly organized in the space provided.

1. One number is five more than another. Their sum is 57. What are the numbers?

2. One number is eight less than another. Their sum is 98. What are the numbers?

3. One number is four times another. Their sum is 95. What are the numbers?

4. Bill won \$60 more than Sam. Together, they won a total of \$150. How much did each person win?

5. Ann earned \$180 less than Sue. Together, they earned a total of \$600. How much did each person earn?

Algebra I Worksheet #2 Unit 3 page 2

Solve each of the following problems algebraically (one variable solution). Show your work neatly organized.

6. The length of a rectangle is four inches more than the width. The perimeter of the rectangle is 80 inches. What are the dimensions (the length and the width) of the rectangle?

7. The length of a rectangle is four times the width. The perimeter of the rectangle is 80 inches. What are the dimensions of the rectangle?

8. The length of a rectangle is 3 times its width. The perimeter of the rectangle is 64 inches. What are the dimensions of the rectangle?

9. The length of a rectangle is 5 inches more than three times its width. The perimeter of the rectangle is 82 inches. What are the dimensions of the rectangle?

Algebra I Worksheet #2 Unit 3 page 3

Solve each of the following problems algebraically (one variable solution). Show your work neatly organized.

10. A collection of ordinary dimes and nickels is worth \$2. If the number of dimes is two more than the number of nickels, then how many coins of each type are there in the collection?

11. A collection of ordinary dimes and quarters is worth \$5.05. If the number of quarters is 5 less than the number of dimes, then how many coins of each type are there in the collection?

12. In a collection of ordinary dimes and nickels there are 15 more dimes than nickels. The total value of the collection is \$7.50. How many coins of each type are there?

13. A collection of ordinary dimes and nickels has a total value of \$4. If there are 58 coins in the collection, then how many coins of each type are there?