Homework #14 - Due Friday 2/1

Directions: Write a system of equations for each word problem. Solve each system.

1) Paul the magician is thinking of two numbers. The sum of the two numbers is 36. The difference is 24. Find the two numbers.

2) The sum of two numbers is 18. Two times the larger plus three times the smaller is 27. Find the numbers.

3) The sum of two numbers is 12. Their difference is 4. Find the numbers.

4) The sum of two numbers is 11. Three times the larger minus two times the smaller equals 8. Find the numbers.

5) A warehouse stacks three large boxes and two small boxes to a height of 11 feet. It also stacks two large boxes and one small box to a height of 7 feet. What are the heights of the large and small box?

6) At a store, three notebooks and two pencils cost $2.80. At the same prices, two notebooks and five pencils cost $2.60. FInd the cost of one notebook and one pencil.

7) Kiana and Jacob each have a collection of identical red and blue marbles. Kiana's collection of 12 red marbles and 8 blue marbles weighs 70 grams. Jacob's collection of 20 red marbles and 12 blue marbles weighs 110 grams. How much does each color marble weigh?

8) At the cafeteria 3 pretzels and 1 soda costs $2.75. Two pretzels and 1 soda costs $2.00. Find the cost of a pretzel and a soda.

9) One one day, four gardeners and four helpers earned $360. On another day, working the same number of hours at the same rate of pay, five gardeners and six helpers earned $480. Find the rate of pay for a gardener and a helper.

10) A baseball manager bought four bats and nine balls for $76.50. On another day, she bought three bats and one dozen balls at the same prices and paid $81.00. How much did she pay for each bat and each ball?