

Name _____

8A; Algebra 1

Date _____

Period _____

How Do We Use Two Variables To Solve Word Problems? Day II

1) A soda machine contains 20 coins; some of the coins are nickels and the rest are quarters. If the value of the coins is \$4.40, find the number of coins of each kind.

2) For a rehearsal performance, 4 adult tickets and 5 senior citizen tickets cost \$27.75. For the same performance, 12 adult tickets and 8 senior citizen tickets cost \$64. Find the price of each kind of ticket.

3) A woman bought 7 ears of corn and 6 oranges for \$3.66. At the same unit prices, a second woman bought 10 ears of corn and 3 oranges for \$3.39. Find the price of an ear of corn and the price of an orange.

4) The total attendance at a school play was 425. The tickets for the students were \$2.50 each, and the regular tickets were \$3.75 each. If the total receipts were \$1,125, how many tickets of each kind were sold?

5) Jim has four more quarters than dimes. If he has \$5.20 in quarters and dimes, how many of each type of coin does he have?

6) Tickets for a high school dance cost \$4.50 each if purchased in advance, and \$5.50 each if bought at the door. For the dance, 250 tickets were sold, and \$1,200 was collected. How many tickets were sold at the door?

7) If 5 times the smaller of two numbers is subtracted from twice the larger, the result is 16. If the larger is increased by 3 times the smaller, the result is 63. Find the numbers.

8) A rectangle has a perimeter of 38 feet. The length is 1 foot less than 3 times the width. Find the dimensions of the rectangle.

9) The sum of two numbers is 36. Their difference is 24. Find the numbers.

10) Jamie is 5 years older than her sister Amy. If the sum of their ages is 19, how old is Jamie?

11) Tickets for a high school dance cost \$10 each if purchased in advance of the dance, but \$15 each if bought at the door. If 100 tickets were sold and \$1,200 was collected, how many tickets were sold in advance and how many were sold at the door?