

Systems of Linear Equations – Word Problems

1. Find two numbers whose sum is 114 and difference is 58.
2. The difference of two numbers is 17 and their sum is 33. Find the numbers.
3. One number is four times another numbers, the sum of the numbers is 140. Find the numbers.
4. One airplane costs four times as much a a certain car. Two such planes cost \$6000 more than six of the cars. Find the cost of each.
5. A part of \$5000 was invested at 4.5% and a part at 5.5%. the 4.5% investment yields \$75 more each year than the 5.5% investment. How much is invested at each rate?
6. Five pounds of tea and 8 pounds of coffee cost \$11.36, while 10 pounds of tea and three pounds of coffee cost \$10.76. What is the price of each per pound?
7. How many pounds of 75-cent candy and how many pounds of \$1.25 candy must be mixed to make a mixture of 90 pounds to sell at 96-cents per pound?
8. A man rowed up a river 10 miles in 5 hours and back in 2,5 hours. Find the rate of the current and his rate of rowing in still water.
9. A chemical company has in storage a 15% solution and a 25% solution of disinfectant. How many gallons of each should be used to make 50 gallons of a 22% solution?
10. What number must be added to both the numerator and denominator of $\frac{11}{12}$ to equal the fraction $\frac{2}{3}$?