

Systems of Equations Word Problems

- 1) Find the value of two numbers if their sum is 12 and their difference is 4.

- 2) The difference of two numbers is 3. Their sum is 13. Find the numbers.

- 3) Flying to Kampala with a tailwind a plane averaged 158 km/h. On the return trip the plane only averaged 112 km/h while flying back into the same wind. Find the speed of the wind and the speed of the plane in still air.

- 4) The school that Stefan goes to is selling tickets to a choral performance. On the first day of ticket sales the school sold 3 senior citizen tickets and 1 child ticket for a total of \$38. The school took in \$52 on the second day by selling 3 senior citizen tickets and 2 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.

- 5) The sum of the digits of a certain two-digit number is 7. Reversing its digits increases the number by 9. What is the number?

- 6) A boat traveled 210 miles downstream and back. The trip downstream took 10 hours. The trip back took 70 hours. What is the speed of the boat in still water? What is the speed of the current?