



**Systems of Equations Word Problems**

*Solve each word problems.*

- 1) The equations of two lines are  $3x - y = 7$  and  $2x + 3y = 1$ . What is the value of  $x$  in the solution for this system of equations? \_\_\_\_\_
- 2) The perimeter of a rectangle is 100 feet. The rectangle's length is 10 feet less than 5 times its width. What are the length and width of the rectangle? \_\_\_\_\_
- 3) A theater sells tickets for a performance. Mr. Smith purchased 8 senior tickets and 5 child tickets for \$136 for his friends and family. Mr. Jackson purchased 4 senior tickets and 6 child tickets for \$96. What is the price of a senior ticket? \$\_\_\_\_\_
- 4) The difference between two numbers is 6. Their sum is 14. What is the greater number? \$\_\_\_\_\_
- 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) The difference between two numbers is 18. Their sum is 66. What are the numbers? \_\_\_\_\_

