

Word Problems: Systems of Equations

Name: _____

Mr. Karolynca

(Show work for credit.)

Set up a system of equations for each problem. Then, solve each system by whatever mathematical means you like.

- 1) John bought tickets and chairs for his softball team. He bought 10 total items and spent \$2000. Each ticket cost \$100 and each chair cost \$50. Let x represent the number of tickets and y represent the number of chairs. How many tickets and chairs did he buy?
- 2) Mrs. Pyle sold 100 cookies for her bake sale. She sold two types of cookies: large-diameter chips and small-ginger butter cookies. She charged \$1 for the chocolate chips and \$0.50 for the peanut butter cookies and collected \$170 total. How many of each type did she sell?
- 3) Peter's Store sold 100 total items from the shelves with 400 items (\$2 each) and 100 items (\$1 each) from the shelves. It took \$100 to make. How many items and how many shelves did it sell?
- 4) Penelope's Printing Press promptly sold 3 more pencils and 10 more pens to the public. It sold 100 writing supplies and took \$100 to make. How many pens and how many pencils did Penelope's Printing Press sell?
- 5) Greg "Chocolate" Barnett tried to shuffle cards in a club tonight. He had 100 CDs, which were each cost \$10. He bought his CDs at a bulk rate \$4 for each and \$1 for the CDs. If his collection was worth \$100, how many of each type of CD did he own?
- 6) 100 items from two new, technology companies. The items accounted for 100 items and cost \$100. The items were \$10 each, which is a total of 100 items. She charges \$10 for accessories and \$10 for additional accessories. They were, she takes \$100 to make. How many amounts of each type from the company?
- 7) Three manufacturers Maroon and American flags. Due to the rate of sales, she charges \$10 for Maroon flags and \$10 for American flags. She sold every night flags and accessories \$100. How many flags of each type did she sell?
- 8) Kathy's Store had a special on technology batteries. It sold 100 for \$1 and 100 for \$10. It sold 100 batteries in a single day and received \$100. How many batteries and of which type were sold?