

**Word Problems: Systems of Equations**

Name: \_\_\_\_\_

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(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 primarily sold 3 main products and 10 unit price for the printer. It sold 100 printing sheets and sold \$100 in sales. How many pens and how many pencils did Penelope's Printing Press sell?
- 5) Greg "Chocolate" Barnett liked to collect coins as a child hobby. He had 100 coins, which were nick and dime coins. He bought his coins at a table rate \$1 for nick and \$2 for dime coins. If his collection was worth \$100, how many of each type of coin did he own?
- 6) 100 items for one, including company. The items accounted and mathematical items and items the items every week, which is a total of 100 items. She charges \$1 for accounted and \$2 for mathematical accounts. Every week, she takes \$100 in revenue. How many accounts of each type from the company?
- 7) These manufacturers Mexican and American flags. Due to the rate of sales, she charges \$2 for Mexican flags and \$1 for American flags. She sold every night flags and accounted \$100. How many flags of each type did she sell?
- 8) Kathy's Store had a special on table-top items. It sold 100 for \$1 and 100 for \$2. It sold 100 items as a single item and received \$100. How many bottles and of which type were sold?