

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 chair cost \$100 and each ticket cost \$20. Let x represent the number of chairs and y represent the number of tickets. How many chairs and tickets 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 public. 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 "Overlord" Bennett 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 for two different companies. 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 Stone had a special one-dimensional function. It sold \$1 for \$1 and \$1 for \$1. It sold 100 items in a single day and received \$100. How many bottles and of which type were sold?