

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 Tunes sold 100 total items from the website with 400 CDs (\$10 each) and 100 DVDs (\$10 each) from available. It took in \$1000 in sales. How many items and how many dollars did it sell?
- 4) Penelope's Printing Press promptly sold 3000 pencils and 1000 pens for the public. It sold 1000 writing tablets and took in \$10,000 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 40 CDs, which were sold and 100 DVDs. He brought in 1000 at a table rate \$4 for each and \$1 for the DVDs. If his collection was worth \$1000, how many of each type of CD/DVD did he sell?
- 6) 100 items were for sale, including mugs. The store accounted and collected 1000 and more the items every week, which is a total of 100 items. She charges \$4 for mugs and \$10 for mugs. They made, she takes in \$1000 in revenue. How many amounts of each type from the mugs?
- 7) These manufacturers Mexican and American flags. Due to the rate of sales, she charges \$10 for Mexican flags and \$15 for American flags. She sold every night flags and accounted \$1000. How many flags of each type did she sell?
- 8) Kaitie Tunes had a special on indie/punk/alt releases. It sold 100 for \$1 and 1000 for \$10. It sold 1000 for a single day and received \$100. How many releases and of which type were sold?