

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 plates for his retirement. He bought 10 total items and spent \$2000. Each ticket cost \$100 and each plate cost \$50. Let x represent the number of tickets and y represent the number of plates. How many tickets and plates did he buy?
- 2) Mrs. Pige and Bill bought tickets for her kids ride. She sold two types of tickets: large-children slips and small-junior-kidder tickets. She charged \$1 for the children slips and \$0.50 for the junior kidder tickets and collected \$275 total. How many of each type did she sell?
- 3) Peter's Store sold 200 total items from the machine with 400 coins (\$2 each) and 1000 coins (\$0.50 each) were available. It took \$200 to make. How many items and how many buttons did it sell?
- 4) Penelope's Printing Press primarily sold 3 main products and 10 unit price for the public. It sold 1000 printing sheets and took \$100.00 to make. How many pens and how many pencils did Penelope's Printing Press sell?
- 5) Greg "Overlord" Bennett tried to shuffle cards in a club lounge. He had 40 CDs, which were rock and reg CDs. He bought his CDs at a bulk rate \$4 for rock and \$2 for reg CDs. If his collection was worth \$200, how many of each type of CD did he own?
- 6) Bill's store has two interchangeable categories. The store accounted and collected items and across the store every week, which is a total of 100 items. She charges \$40 for accounted and \$20 for unaccounted amounts. Every week, she takes in \$2000 in revenue. How many amounts of each type does she average?
- 7) These manufacturers Mexican and American flags. Due to the rate of sales, she charges \$20 for Mexican flags and \$15 for American flags. She sold every night flags and accounted \$400. How many flags of each type did she sell?
- 8) Kathy Stone had a special one-time-price for her items. It sold \$2 for \$1 and \$2 for \$1. It sold 40 tickets in a single day and received \$100. How many tickets and of which type were sold?