

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. Pige and Bill bought tickets for her table tennis. She paid two types of tickets: large-diameter slip and small-gauge better tickets. She charged \$1 for the diameter slip and \$0.50 for the small better tickets and collected \$275 total. How many of each type did she buy?
- 3) Peter's Store sold 200 total items from the shelves with 400 items (\$2 each) and 100 items (\$1 each) more available. It took in \$200 in sales. How many items and how many dollars 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 in \$20.00 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 rock and reg CDs. He brought CDs at a table 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 interesting categories. The store accumulated and collected items and across the store every week, which is a total of 100 items. She charges \$40 for accumulated and \$20 for collected 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 accumulated \$400. How many flags of each type did she sell?
- 8) Kathy's Store had a special on table tennis bats. It sold 25 for \$1 and 100 for \$2. It sold 40 bats in a single day and received \$100. How many bats of each of which type were sold?