

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 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-juniors tickets. She charged \$1 for the children slips and \$0.50 for the junior tickets and collected \$275 total. How many of each type did she sell?
- 3) Peter's Store sold 200 total items from the website with 400 items (\$2 each) and 160 items (\$1 each) more available. It took in \$600 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 utensils and took in \$20.00 in sales. How many pens and how many pencils did Penelope's Printing Press sell?
- 5) Greg "Chocolate" Barnett tried to collect money as a side job. He had 40 CDs, which were each sold for \$5. He brought in CDs at a table rate \$4 for each and \$2 for reg CDs. If his collection was worth \$200, how many of each type of CD did he sell?
- 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 \$2800 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 Store had a special on tablespoons bottles. It sold 25 for \$1 and 100 for \$2. It sold 40 bottles as a single top and received \$100. How many bottles and of which type were sold?