

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 restaurant. He bought 10 total items and spent \$2000. Each table cost \$100 and each plate cost \$20. Let x represent the number of tables and y represent the number of plates. How many tables and plates did he buy?
- 2) Mrs. Pige and Bill bought for her table sets. She sold two types of tables: large-rectangle sets and small-rectangle sets. She charged \$1 for the rectangle sets and \$1000 for the great table sets and collected \$200 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 100 items (\$1 each) from the store. It took in \$200 in sales. How many items and how many dollars did it sell?
- 4) Penelope's Printing Press primarily sold 3 main products and 10 unit price for the printer. It sold 100 printing sheets and took in \$20.00 in sales. How many pens and how many pencils did Penelope's Printing Press sell?
- 5) Greg "Overlord" Bennett liked to collect cards as a side hobby. He had 40 CDs, which were rock and pop CDs. He bought his CDs at a table rate \$4 for rock and \$2 for pop CDs. If his collection was worth \$100, how many of each type of CD did he own?
- 6) Bill's store has two bestselling categories. The more successful and profitable items sell more the more every week, which is a total of 100 items. She charges \$40 for successful and \$20 for profitable products. 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 \$10 for American flags. She sold every night flags and generated \$400. How many flags of each type did she sell?
- 8) Kathy's Store had a special on tablecloths fabrics. It sold 20 for \$1 and 100 for \$2. It sold 40 fabrics as a single top and received \$100. How many fabrics and of which type were sold?