

Systems of Equations-Word Problems**Examples:**

1. You are selling tickets to a high school play. Student tickets cost \$5 and general admission tickets cost \$8. You sell 556 tickets and collect \$3797.
Write a system of linear equations that represent the situation. Solve the system to find out how many of each type of ticket you sold.

2. A bag contains dimes and nickels. There are 18 coins in the bag. The total value of the coins is \$1.25. Find out how many nickels and how many dimes are in the bag.

3. You and your sister decide to combine your weekly overtime earnings to buy a birthday gift for your mother. Your overtime rate is \$ 18 per hour and your sister's overtime rate is \$24 per hour. The total amount earned for the gift was \$288. If you worked two more hours of overtime than your sister, how many overtime hours did each of you work?

Systems of Equations-Word Problems Worksheet #1

1. Two families go to a hockey game. One family purchases two adult tickets and four youth tickets for \$28. Another family purchases four adult tickets and five youth tickets for \$45.50. Let x represent the cost in dollars of one adult ticket and let y represent the cost in dollars of one youth ticket. Write a linear system that represents this situation and solve the linear system to find the cost of one adult ticket and one youth ticket. *How much would it cost two adults and five youths to attend the hockey game?*

2. At a grocery store, a customer pays a total of \$11.10 for 1.6 pounds of chicken and 2 pounds of fish. Another customer pays a total of \$12.15 for 2.4 pounds of chicken and 1.8 pounds of fish. *How much do 2 pounds of chicken and 2 pounds of fish cost?*

3. You want to have a pizza party this weekend for some friends and family. You have \$48 budgeted for the pizza and plan on having 56 pieces available. A large pizza has 16 pieces and costs \$14. A medium pizza has 12 pieces and costs \$10. How many large and medium pizzas do you need to buy?