

Using Systems of Equations to Solve Problems, Lesson 2

Name: _____

Define your variables. Write two equations from the given information. Solve the system and state your solution, including units.

Practice:

- 1) Paul has 54 coins, all nickels and quarters. The value is \$9.50. How many nickels and how many quarters does Paul have?
- 2) Six snickerdoodles plus four oatmeal cookies have 580 calories. Five snickerdoodles plus six oatmeal cookies have 670 calories. How many calories are in each kind?
- 3) The price of a jacket is \$15 less than twice the price of a hoodie. If four hoodies and three jackets cost \$305, find the price of each item.
- 4) A group of students goes to Baskin Robbins. If two have sundaes and five have milkshakes, the bill will be \$18. If five have sundaes and two have milkshakes, the bill will be \$24. Find the price of each treat.
- 5) The cost of admission to the concert was \$90 for a group of 10 children and 3 adults. The admission was \$122 for another group of 7 children and 8 adults. What was the admission price for each child? What was the admission price for each adult?
- 6) A group of students take their science teacher out for lunch. If five have steak and three have lobster, the bill will be \$245. If three have steak and five have lobster, the bill will be \$291. What is the price of a steak dinner? What is the price of a lobster dinner?
- 7) Cameron has 77 coins all nickels and dimes, worth \$6.60. How many of each type of coin does Cameron have?
- 8) The cost of admission to the ballgame was \$150 for a group of 8 children and 3 adults. The admission was \$168 for another group of 11 children and 2 adults. What was the price of admission for an adult? What was the price of admission for a child?
- 9) At Pi Pizza, the total price for 5 large pizzas plus two medium pizzas is \$142. The total for 4 large pizzas plus 3 medium pizzas is \$136. What is the price for each size of pizza?
- 10) Twice Hannah's savings plus Gillian's savings is \$108. Four times Hannah's savings plus 6 times Gillian's savings is \$424. How much has each girl saved?
- 11) Brandon has 41 coins, all quarters and dimes, in his piggy bank. If the value of the coins is \$6.50, how many of each type of coin does he have?
- 12) Sydney scored 15 points less than three times the number of points scored by Riley. Together they scored a total of 33 points. How many points were scored by each player?