

Unit 7 Lesson 7 Homework

Solve each word problem ON A SEPARATE SHEET OF PAPER using a system of equations. Be sure to show all 4 steps (define a variable, write a system of equations, solve the system, and write your solution as a complete sentence).

1. When one number is added to three times another number the result is 24. Five times the first number added to three times the second number is 36. Find the numbers.
2. The perimeter of a rectangle is 56 centimeters. The length of the rectangle is 2 centimeters more than the width. Find the length and width of the rectangle.
3. Ashley had a summer lemonade stand where she sold small cups of lemonade for \$1.25 and large cups of lemonade for \$2.50. If Ashley sold 155 cups of lemonade and made \$265, how many cups of each type did she sell?
4. The sum of two numbers is 30 and its difference is 12. Find the two numbers.
5. The sum of two numbers is 36. Twice the first number minus the second is 6. Find the numbers.
6. Tickets to a movie cost \$7.25 for an adult and \$5.50 for students. A family purchased 8 tickets for \$52.75. How many adult and how many student tickets were purchased?
7. The length of a rectangle is 3 times the width. What are the dimensions of the rectangle if the perimeter is 86 centimeters?
8. Sue has 100 dimes and quarters. If the total value of the coins is \$21.40, how many of each kind of coin does she have?
9. The perimeter of a rectangle is 46 inches. If the width were doubled and the length was increased by 5 inches, the perimeter would be 66 inches. What is the length of the original rectangle?
10. Ben and Jerry are raising money for their class trip by selling wrapping paper. Ben raised \$43.50 by selling 12 rolls of solid paper and 9 rolls of printed paper. Jerry raised \$51.50 by selling 8 rolls of solid paper and 15 rolls of printed paper. Find the cost of each type of wrapping paper.