

Unit 6

Name: _____

Worksheet: Solving word problems using systems of equations (part 2). Identify your variables, set up a system of equations, and solve for your variables.

1. The cost of 5 squash and 2 zucchini is \$1.32. Three squash and 1 zucchini cost \$0.75. Find the cost of each vegetable.

2. Judy worked 8 hours and Ben worked 10 hours. Their combined pay was \$80. When Judy worked 9 hours and Ben worked 5 hours, their combined pay was \$65. Find the hourly rate of pay for each person.

3. Four baseball cards of Babe Ruth and 3 cards of Satchel Paige sold for \$105 at a baseball card convention. Later that weekend, two Babe Ruth cards sold and 3 Satchel Paige cards sold for \$63. Find the value of each card.

4. Students in a theatre class sold 160 adult and 340 student tickets for a play worth \$1,480. If 80 adult tickets and 400 student tickets totaled \$1200, how much did each ticket cost?

5. The talent-show committee sold a total of 530 tickets in advance. Student tickets cost \$3 each and the adult tickets cost \$4 each. If the total receipts were \$1740, how many of each type of ticket were sold?

6. The length of a rectangle is 4cm longer than the width. The perimeter is 80 cm. Find the length and the width.

7. A collection of nickels and quarters is worth \$2.85. There are 3 more nickels than quarters. How many nickels and quarters are there?

8. Ann and Betty together have \$60. Ann has \$9 more than twice Betty's amount. How much money does each have?

9. A bowl contained 13 red and brown M&M's. There was one more red M&M's than brown M&M's. How many of each color are in the bowl?

10. A movie theater charges \$5 for an adult's ticket and \$2 for a child's ticket. One Saturday, the theater sold 785 tickets for \$3280. How many of each type of ticket were sold?

11. Jason bought a total of 7 postcards for \$1.80. If the small postcards cost \$0.20 and the larger ones cost \$0.30 each, how many postcards of each size did he buy?

12. Victor earns \$4.25 an hour working after school and \$5 an hour working on Saturdays. Last week he earned \$67.50, working a total of 15 hours. How many hours did he work on Saturday?

13. The length of a rectangle is 5 cm less than three times its width. If the perimeter is 70 cm, find the dimensions.

14. Thirty students bought pennants for the football game. Plain pennants cost \$4 each and fancy ones cost \$8 each. If the total sales were \$168, how many students bought fancy pennants?

15. A pear has 15 more calories than a grapefruit. Twenty pears and ten grapefruits have a total of 1800 calories. How many calories are in each type of fruit?

