

Unit 1 Function Relationships

Day 2 Worksheet

Writing Equations to Model Situations (PH 2-5)

Name _____

Date _____ **Hour** _____

Define a variable for each situation. Write an equation to model each situation, then solve.

1. If seven is subtracted from a number, the result is 68. Find the number.

2. A number divided by 5 is 23. Find the number.

3. When a number is multiplied by 5 and increased by 7, the result is 82. Find the number.

4. The sum of Grant's age and Madison's age is 43 yrs. Write and solve an equation to find Grant's age if Madison is 19 years old.

5. A number is one less than 3 times another number. If their sum is 59, find the numbers.

6. Suppose you want to buy some pizza and crazy bread from Little Caesars' for \$30. Crazy bread costs \$2.50 per order and a pizzas cost \$5 each. Suppose you buy 4 orders of crazy bread. How many pizzas can you buy? Set up an equation and solve.
7. The length of a rectangle is 5 in. more than its width. The perimeter of the rectangle is 90 inches. What are the length and width of the rectangle? Draw a picture.
8. Consecutive integers differ by one. The sum of three consecutive integers is 756. Write and solve an equation to find the three integers.
9. The sum of two consecutive even integers is 150. What are the integers?
10. You are shopping at Target and have \$40 to spend. You know that sales tax is 6%, how much can you spend on the items in your cart?