

**Math 090**  
**Worksheet - Unit 6**

Name \_\_\_\_\_ Date \_\_\_\_\_

For numbers 1-3, define your variable; then write the statement as an algebraic expression.

1) The weight increased by 20 pounds.  
Variable: \_\_\_\_\_

2) Eighteen percent of the cost.  
Variable: \_\_\_\_\_

3) One-third the age.  
Variable: \_\_\_\_\_

For numbers 4-10, define your variable, write an equation that represents the problem, and solve the problem.

4) One number is 4 less than twice the other number. Their sum is 14. Find the two numbers.  
Variable: \_\_\_\_\_  
Equation: \_\_\_\_\_

5) You bought a TV for 10% off. If you paid \$90 for the TV, what was the original price (without the discount)?  
Variable: \_\_\_\_\_  
Equation: \_\_\_\_\_

6) Marie is 6 years older than twice Denise's age. The sum of their ages is 48. How old is Marie?

Variable: \_\_\_\_\_

Equation: \_\_\_\_\_

7) For two consecutive integers, the sum of the smaller and twice the larger is 38. Find the two numbers.

Variable: \_\_\_\_\_

Equation: \_\_\_\_\_

8) Recall: The perimeter of a rectangle with length,  $l$ , and width,  $w$ , is  $P = 2l + 2w$ . The length of a rectangular soccer field is 6 feet longer than twice the width. If the court's perimeter is 228 feet, what are the dimensions?

Variable: \_\_\_\_\_

Equation: \_\_\_\_\_

9) The sum of a number and twice that number decreased by 5 is 19. Find the number.

Variable: \_\_\_\_\_

Equation: \_\_\_\_\_

10) The length of a rectangle is one centimeter more than twice its width. The perimeter is 65 cm. Find the dimensions of the rectangle.

Variable: \_\_\_\_\_

Equation: \_\_\_\_\_