**Instructions:** Define the following:

1. Procedural Programming

2. Pseudocode

3. Assignment Statement

4. Rules of Precedence

5. Relational Operators

6. Compound Condition

7. Loop Control Variable

8. Sentinel Value

9. Array

10. Binary Search

**Instructions: List the best possible term for each question.**

1. When using a flowchart, input is represented by what geometric shape?

2. The rules that govern a programming language are called \_\_\_\_.

3. The instruction Myanswer = Mynumber\*2 is an example of a(n) \_\_\_\_ operation.

4. In the following statement, which arithmetic operation is performed first?

answer = a + b +c \* d / e – f

5. What is an equivalent way to write the following statement?

answer = a + b + c \* d / e – f

6. What operator has the lowest precedence?

7. The structure which takes one of two paths based on a decision is called a(n) \_\_\_\_ structure.

8. When you need to ask multiple questions before an outcome is determined, you must create a \_\_\_\_.

9. Which takes precedence when the two are combined in a single statement: AND or OR?

10. A(n) \_\_\_\_ is any numeric variable you use to count the number of times an event has occurred.

11. When the value of a loop control variable is not altered by arithmetic, but instead is altered by user input, this is known as a(n) \_\_\_\_ loop.

12. At the beginning of any method, it is the programmer’s responsibility to \_\_\_\_ all variables that must start with a specific value.

13. A \_\_\_\_, also called an index, is a number that indicates the position of a particular item within an array. 14. When you declare an array, you provide a(n) \_\_\_\_ name for a number of associated variables in memory.

15. Every array has a(n) \_\_\_\_ size.

**Instructions: Answer the following coding questions. You do not have to write full programs or declare variables. Only write the snippet of code. Do not write pseudocode.**

**Question 1:**

What is the answer for the following operations: a. (2+4) \* 8 – 3 /10

b. 20 /2 – 3 \* 5 + (4-3)

**Question 2:**

Write an IF-THEN statement for the following:

Display a message to user stating it is cold outside if the temperature is between 30 degrees and 55 degrees; otherwise, display a message to the user that the weather is nice out today.

**Question 3:**

Write a FOR loop that adds the numbers from 1 to 10 and displays the result.

**Question 4:**

Write a WHILE loop that squares each number starting with 1 and ends when the square equals 49.

**Question 5:**

Write an array that stores the square of the numbers from 1 to 5 in each element. Write out each element. You must

use a looping structure for this program.