**Multiple Choice**

1. The memory that is allocated for a \_\_\_\_\_ variable is the actual location that will hold any value that is assigned to that variable*.*  **C. Value**
2. A variable that is used to reference an object is commonly called a(n) \_\_\_\_\_.  **A. Reference Variable**
3. When you want to work with an object, you use a variable that holds a special value known as a(n) \_\_\_\_\_ to link the variable to the object.  **A.Union**
4. The \_\_\_\_\_ creates an object in memory and returns a reference to that object.  **D. New Operator**
5. A(n) \_\_\_\_\_ is an object that can hold a group of values that are all of the same data type.  **A.Array**
6. The \_\_\_\_\_ indicates the number of values that the array should be able to hold.  **B. Size Declarator**
7. The storage locations in an array are known as \_\_\_\_\_.  **A. Elements**
8. Each element in an array is assigned a unique number known as a(n) \_\_\_\_\_.  **B. Subscript**
9. When you create an array, you can optionally initialize it with a group of values called a(n) \_\_\_\_\_.  **B. Initialization List**
10. In C#, all arrays have a \_\_\_\_\_ that is set to the number of elements in the array.  **C. Length property**
11. A(n) \_\_\_\_\_ occurs when a loop iterates one time too many or one time too few.  **D. Off-by-one error**
12. C# provides a special loop that, in many circumstances, simplifies array processing. It is known as the \_\_\_\_\_.  **B. Foreach loop**
13. The foreach loop is designed to work with a temporary, read-only variable that is known as the \_\_\_\_\_.  **D. Iteration Variable**
14. \_\_\_\_\_ is a process that periodically runs, removing all unreferenced objects from memory.  **D. Memory Cleanup**
15. Various techniques known as \_\_\_\_\_ have been developed to locate a specific item in a larger collection of data, such as an array. **D. Search Algorithms**
16. The \_\_\_\_\_ uses a loop to step through an array, starting with the first element, searching for an item.  **A. Sequential Search Algorithm**
17. A(n) \_\_\_\_\_ is a type of assignment operation that copies a reference to an array and not the contents of the array. **B. Reference Copy**
18. The \_\_\_\_\_ is a clever algorithm that is much more efficient than the sequential search. **C. Binary Search**
19. A \_\_\_\_\_ is similar to a two-dimensional array, but the rows can have different numbers of columns.  **C. Jagged Array**
20. The .NET Framework provides a class names \_\_\_\_\_, which can be used for storing and retrieving items.  **D. List**

**True or False**

1. When you are working with a value type, you are using a variable that holds a piece of data.  **T**
2. Reference variables can be used only to reference objects.  **T**
3. Individual variables are well suited for storing and processing lists of data.  **F**
4. Arrays are reference type objects.  **T**
5. You can store a mixture of data types in an array.  **F**
6. When you create a numeric array in C#, its elements are set to the value 0 by default.  **T**
7. The subscript of the last element will always be one less than the array’s Length property.  **T**
8. You use the == operator to compare two array reference variables and determine whether the arrays are equal.  **T**
9. A jagged array is similar to a two-dimensional array, but the rows in a jagged array can have different numbers of columns. T
10. When you create a List object, you do not have to know the number of items that you intend to store in it.  **T**