**Chapter 7 Array Worksheet**

1. How are the elements of an array accessed?
2. What is the syntax for an array initializer?
3. What is the syntax to declare an array reference variable?
4. How do you create an array?
5. When is the memory allocated for an array?
6. What is the data type for an array index?
7. What is the first index value in an array?
8. If you declare an array double[] list = {3.4, 2.0, 3.5, 5.5}, the value of list[1] is \_\_\_\_\_\_\_\_.
9. Write Java statements that will assign all the values in an array, named beta with a size of 10, to 3.
10. What is the output of the following code?

int size = 10;

int [] grades = new int [size];

size = 20;

System.out.println(“Size variable = “ + size);

System.out.println(“The size of the grades array is = “ + grades.length);

1. What is the output of the following code?

public class Homework{

public static void main(String[] args){

int [] list = {5, 10, 15, 20};

for(int index = 0; index < list.length; index++)

System.out.println(list[index]);

}// end main

}// end class

1. What is stored in memory for the array list after the following code executes?

for (int i = 0; i < list.length; i++){

list[i] = 2\*i;

}

1. When an array is passed to a method, what is passed?
2. Perform the linear search on the following numbers: 10, 15, 17, 25, 35, 41, 55. The target value is 35. Show all steps and index values for credit.
3. Perform the binary search on the following numbers: 10, 15, 17, 25, 35, 41, 55. The target value is 35. Show all steps and index values for credit.