CSCI 2170 Quiz 1 **Name _____**

1. Given the array declared and initialized as the following:

```
const int SIZE=8;
float  values[SIZE] = {2.2, 1.3, 4.5, 6.3, 6.6, 2.5, 3.5, 8.8};
```

Show the C++ statements needed to compute the sum of all the values in the array "values".

2. **This problem has two parts. (The second part is on the back page)**
   The function **Insert** does not work quite the way it is supposed to.
   a. **Step through the code shown below and write down the <u>output of the current version of the program</u>.**

```
#include <iostream>
using namespace std;

int Insert(int [], int, int, int);
const int SIZE = 10;   // maximum number of items to store in array

int main()
{
        int array[SIZE], value=0, position=1, aSize=4;

        for (int i=0; i<aSize; i++)   // initialize array
            array[i] = 2*i+1;

        // insert value into array at position
        aSize = Insert(array, value, position, aSize);

        // display values after the insertion
        for (int i=0; i<aSize; i++)
            cout << array[i] << " ";

        return 0;
}
```

Show program output here:

```
// this function inserts "element" in the given "position"  in array "arr". It returns the new array size
int Insert(int arr[], int element, int position, int size)
{
        for (int i=position; i<size; i++)
            arr[i+1] = arr[i];
        arr[position]= element;
        size=size+1;

        return size;
}
```

b. **How would you modify the function <u>Insert</u> to correctly insert an element into the array at position "position"?** For example, before insertion, array looks like this: 5 7 9 2. After the insertion of element 6 at position 2, array looks like this: 5 7 6 9 2