Quiz 4

1. What is printed by the following program?

```cpp
#include <iostream>
#include <cctype>
#include <cmath>
using namespace std;
int checker(char, int);
int main()
{
    int i;
    char ch = 'W';
    for (i = 0; i < 3; i++)
    {
        cout << checker(ch, i) << endl;
        if (i == 1)
            ch = 'D';
    }
}
int checker(char c, int x)
{
    if (c == 'W')
        return x * 2;
    else
        return x - 4;
}
```

2. What is printed by the following program segment if the input is:

6  7  3   0  1

```cpp
int num;
double product = 1;
cin >> num; // you can put all the input here with enter after 1
while (num > 0)
{
    product *= num;
    cout << product << " * ";
    cin >> num;
}
cout << " = " << product << endl;
```

//if input each number separately, output is:

```
6
6 * 7
42 * 3
126 * 0
 = 126
Press any key to continue . .
```

.
3. Write a loop that computes the sum of all the positive numbers between 1 and 100.

```cpp
int sum = 0;
int i;
for (i = 1; i <= 100; i++)
    sum += i;
cout << sum;
```

4. A function `checkZeros` accepts three `double` parameters. It checks to see if the sum of all three parameters is equal to zero. If this sum is equal to zero, the function returns `true`, otherwise the function returns `false`.

Give an example CALL from main:

```cpp
//call
double x, y, z;
cin >> x >> y >> z;
if (checkZeros(x, y, z))
    cout << “Yes!”;
```

Write the prototype for the function:

```cpp
//prototype
bool checkZeros(double, double, double);
```

Write down the definition (header and body) for the function.

```cpp
//definition
bool checkZeros(double a, double b, double c)
{
    if ((a + b + c) == 0)
        return true;
    return false;
}
```