

CS 2500, Spring 2011 – Programming II
Quiz 2

There are 5 questions (last two questions are on the back of the page).

Name: _____

1. Define a recursive function?

2. What are the Four Questions for constructing a recursive function?

3. Given an integer $n > 0$, write a recursive C++ function that returns the sum of 1 through n . The function declaration is:

```
int recursive_sum(int number);
```

4. Describe the problem with the following recursive function:

```
void printNum( int n)
{
    cout << n << endl;
    printNum(n-1);
}
```

5. Consider the following recursive function:

```
void nesto(int n)
{
    cout << n;
    if (n != 0)
    {
        nesto(n-1);
        cout << n;
    }
}
```

- a. What is written if the call `nesto(0)` is made?

- b. What is written if the call `nesto(1)` is made?

- c. What is written if the call `nesto(2)` is made?

- d. What is written if the call `nesto(3)` is made?