CSci 1113
Quiz

Name: _____

Student ID: _____

Instructions: Please pick and answer any 3 of the 4 problems for a total of 30 points. If you answer more than 3 problems, only the first 3 will be graded. The time limit is 30 minutes. Please write your answers in the space provided. The exam is open book and notes. You may use electronic devices to ONLY look at either an e-book version or electronic notes. You may not use the internet, compiler or any other outside resources. (If you are typing on your keyboard/input device for anything other than ctrl-F to find words in the e-book or notes, this is probably not acceptable.)

Problem (1) [10 points] What is the output of this code:

```
int x = 3;
double y = x/2;
y*=2;
x%=x;

cout << x << y << endl;

int a = 10;
int b = 3;
int c = a + ++b;
cout << c++ % a << endl;
cout << a << " " << b << c << endl;
```

Problem (2) [10 points] The triangle inequality states that if three edges can form a triangle, the sum of any two edges must be greater than or equal to the third. Write a code as if it were inside main() (you do not need to do #includes and such) that reads three edge lengths and determines whether or not they could make a triangle. Assume edge lengths will be whole numbers.

Problem (3) [10 points] Write code that will read in someone's first and last name and output their initials. So if the user entered "rizwan ventseslav" you would display (without quotes): "r.v."

Problem (4) [10 points] Find 3 errors in the code below. Assume that the code is completely shown except for #includes and "using namespace std". For each error, identify whether it is a runtime error, syntax error or logic error. You must also precisely describe why you think the part of code you identify is an error.

```cpp
int main()
{
    int x, y;
    cin << x;
    int sum;
    if(x==y)
        sum = x;
        sum = sum*2;
    else (x!=y)
        sum = x+y;
    cout << "Sum is " << sum << endl;

    return 0;
}
```