QUIZ 2
FIRSTNAME: LASTNAME: DATE:

1) (30 pts) Write a complete C++ program that prompts the user to enter 4 numbers. The program should then output the minimum of the numbers.

2) (30 pts) Write a complete C++ program that prompts the user to enter a number x. The program should then output the number f(x) given by the following formula.

$$
f(x) = \begin{cases} x^2 & \text{if } x<0 \\ 9 & \text{if } x=0 \\ x/(x+1) & \text{if } 0< x <= 10 \\ x^2 + 1/x+1 & \text{if } 10< x \end{cases}
$$

3) (30 pts) Write a complete C++ code that prompts the user to enter two numbers x and y. The program should then output their sum if both numbers are divisible by 9, their product if only one of them is divisible by 9.

4) (10 pts) What is displayed by the following code. Suppose the input is 9 9?

```cpp
#include <iostream>
using namespace std;
int main(){
        int num1, num2;
        cout << "Enter two integers: ";
        cin >> num1 >> num2;
        if(num1 >= num2){
                switch(num1%num2){
                        case 0:
                                num2 = ++num1/2;
                                break;
                        case 1:
                                num1 = num2/2;
                                break;
                }
        }
        else{
          num1 = num1 – num2++;
          num2 = (num1 + num2)/2;
        }
        cout << num1 << " " << num2 << endl;

        return 0;
}
```