

## CS101/ Sample Quiz #3

NAME: \_\_\_\_\_

1. Consider the following program

```
#include <iostream.h>
void main(){
    int a, b;
    cin >> a >> b;
    if (a>0){
        if (b>0) cout << b;
        else cout << -b;
    }
    else cout << a;
    cout << endl;
}
```

For each of the following inputs, give the corresponding output:

Input	Output
1 2	2
1 -2	2
-1 2	-1
-1 -2	-1

2. Mark each of the following logical expressions as true or false. You may assume that we have declared

```
int x, y, z;
x=1; y=2; z=3;
```

Expression	True	False
(x>1)		<b>X</b>
(x!=1)		<b>X</b>
(x>1)    (z<10)	<b>X</b>	
!((x<1) && (z>4))	<b>X</b>	
(x<y) && (z==3)	<b>X</b>	

3. Write a code fragment to print the message OK if the integer variable  $x$  satisfies

$$10 < x \leq 20$$

and which prints not OK if not.

```
if ((10 < x) && (x <= 20)) cout << "OK\n";
else cout << "not OK\n";
```

4. What is the output?

```
#include <iostream.h> void main(){
    int n=8; int sum=0;
    while ((n>1) && (sum<15)){
        cout << sum << endl;
        cout << n << endl;
        sum=sum+n;
        n=n-2;
    }
}
```

Output:

```
0
8
8
6
14
4
```