

Math 201 - Quiz 3

February 4, 2015

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (3 points) If a , b , and c have all been assigned the value 2, what will their values be after each statement is executed?

(a) $a = b * ++c$ a IS REASSIGNED THE VALUE $2 * 3$

⇒ $a = 6, b = 2, c = 3$

(b) $a = (b--) + (c++)$

a IS REASSIGNED THE VALUE $2 + 2$

$a = 4, b = 1, c = 3$

(c) $a = ++b \% c$

a IS REASSIGNED THE VALUE $3 \% 2$

$a = 1, b = 3, c = 2$

2. (2 points) Consider the following program.

```
#include <iostream>
using namespace std;

int main()
{
    int j = 5.7, k = 4.9;

    cout << "j + k = " << j + k << endl;

    return( 0 );
}
```

- (a) What output does this program produce? Why?

$j + k = 9$ (THEN A LINE BREAK.)

BECAUSE j & k ARE DECLARED
TYPE `int`, THEY ARE ASSIGNED

- (b) What single change should be made to produce the actual value of $5.7 + 4.9$? VALUES 5 & 4.

IN PLACE OF `int`, USE `float`