

ICS202 QUIZ#1 (Term 061)

Duration: 20 minutes

ID#: _____ NAME: _____

1. Suppose a container c contains Int objects. Write a visitor class called MyVisitor , which has the following behavior when visiting c :

- The visit method prints all the Int Objects that have an odd value.

```
public class MyVisitor extends AbstractVisitor
{
    public void visit(Object obj)
    {

    }
}
```

2. If $f(n) = n^3 + n^2 - 2n + 10$ prove that this function belongs to class $O(n^3)$

3. Count the total number of basic operations in the following code. Show the details of your answer to receive any partial credit.

```
int sum = 0;
for(int i = 0; i < n * n; i++)
    for(int j = n; j > 0; j--)
        sum += i * j - 5;
```