COSC 120 Exam Review #2
Fall 2010

1.) Write a method xDividesY which takes in two integer and returns a Boolean. The return value is true if y is a multiple of x and false if y is not a multiple of x.

2.) What's the difference between public and private as it relates to an instance variable?

3.) Name three primitive types.

4.) What's the difference between an object and a class?

5.) What are the behaviors, attributes and questions for a class that represents a chair?

6.) Find the errors in the following code and explain them.

```
public void run(){
  if (x<5{
    System.out.println("x=" , x)
    x--;
  }
```

7.) What is the correct signature for the main method?

8.) Give three possible correct configurations of an if statement.

9.) Give the code for the method isEven. Assume that you will be passing in the number to be tested as a parameter and return a boolean indicating whether or not the number was even.

10.) What is the difference between a method and a program?

11.) How do you specify that a method requires 3 integers to be passed to it?

12.) When will success be displayed in the following code?

```
        if( letter == "a" || letter == "A" && (x > 5 && x < 10) ){
                println( "success!" );
        }
```

13.) What is wrong with the following code:

```
public class test {
        private int n1;

        private int foo(int x){
```

```
            return n1*x;
        }

        public void run() {
            n1 = 4;
            x = 4;
            System.out.println("The answer is" + foo());
        }
}
```

14.) Given the following class definition, what methods can be called?

```
public class Student{
        private String student_name;
        private int id_number;

        public Student(String name, int id){
            student_name = name;
            id_number = id;
        }

        public String toString() {
            return (student_name + "(#" + id_number + ")");
        }

        public String getName() {
            return student_name;
        }

        public int getID() {
            return id_number;
        }
}
```

15.) What's the Turing Test?

16.) Create a method called myRun that will get input for three integers from the user using a Scanner and then print out the result of the following method:

```
        public int add3Integers (int a, int b, int c){
            return a+b+c;
        }
```

Note that you'll be using the three integers that you got from the user as the parameters for add3Integers.

17.) Create the if statement(s) that will print out the largest number between three integer variables x, y and z.

18.) Create the method signature for the method add3Floats that will take three floating point numbers as parameters and return the sum of those three numbers.

19.) Create a class called myQuickCalculator with three methods: add2ints, sub2ints and mult2ints. add2ints will have two integers taken in as parameters and return the sum of those two integers. sub2ints will do the same, except subtracting the values and mult2ints will do the same, except multiplying the values.

20.) List and describe 4 subtopics in Artificial Intelligence.