1. (2 pts) Suppose we have a class definition called Student.java that has a constructor which accepts a student number. What will be printed by the following code? Explain.

```java
public static void main(String[] args) {
    Student student = new Student(1);
    Student student1 = new Student(1);
    System.out.println(student == student1);
}
```

2. (2 pts) Suppose we have the following method in Student.java.

```java
public boolean equals(Object o) {
    Student student = (Student)o;
    return(studentNumber() == student.studentNumber());
}
```

Given that there is a public instance method called studentNumber() defined in Student.java, will the code in this method cause a compile-time error?

Is there the potential for a run-time error? If so, what run-time error could occur and why would it occur?

3. (2 pts) The parameters listed in the declaration of a method are called the parameters, and the parameters listed in the call to the method are called the parameters.

4. (2 pts) If the class definition of MyClass does not have an extends clause, then MyClass automatically extends the class, and since the compiler does not complain when we do not use the keyword super within the constructor of MyClass, what can we definitely say about the class definition that MyClass automatically extends?

5. (2 pts) Suppose we have the following method definition in the class definition of Student.java. Is this an example of method overriding or method overloading? Explain.

```java
public String toString(String string) {
    return(string);
}
```