MPP Midterm Practice Problems

1. What happens when the program is compiled/run?

```
class MyClass {
   static int amount = 1;
   public static void main(String[] args) {
      System.out.println(this.amount);
   }
}
```

a. Compiler error
b. Runtime error
c. Outputs 1 to the console
d. Outputs 0 to the console

2. What happens when the program is compiled/run?

```
class MyClass extends MySuperClass {
   public static void main(String[] args) {
      MySuperClass cl = new MyClass();
      System.out.println(cl.getType());
   }

   public int getType() {
      return 3;
   }
}
class MySuperClass {
   public int getType() {
      return 2;
   }
}
```

a. Compiler error
b. Runtime error
c. Outputs 2 to the console
d. Outputs 3 to the console

3. What happens when the following program is run?

```
class MyClass extends MySuperClass {
   public static void main(String[] args) {
      MySuperClass cl = new MySuperClass();
      System.out.println(cl.getType());
   }

   public int getType() {
      return 3;
   }
}
class MySuperClass {
   public int getType() {
      return 2;
   }
}
```

a. Compiler error
b. Runtime error
c. Outputs 2 to the console
d. Outputs 3 to the console

4. What happens when the following program is run?

```
public class Sub extends Super {
    public static void main(String[] args) {
            Sub.print();
    }
}

public class Super {
    static void print() {
            System.out.println("hello");
    }
}
```

a. Compiler error
b. Runtime error
c. Outputs “hello” to the console

5. What happens when the following program is run?

```
public class Sub extends Super {
    public static void main(String[] args) {
            Super s = new Sub();
            s.print();
    }
    public static void print() {
            System.out.println("bye");
    }
}

public class Super {
    static void print() {
            System.out.println("hello");
    }
}
```

a. Compiler error
b. Runtime error
c. Outputs “hello” to the console
d. Outputs “bye” to the console