1. Given:
```
class Top {
      public Top(String s) { System.out.print("B"); }
}
public class Bottom2 extends Top {
      public Bottom2(String s) { System.out.print("D"); }
      public static void main(String [] args) {
            new Bottom2("C");
            System.out.println(" ");
      }
}
```
What is the result?
A. BD
B. DB
C. BDC
D. DBC
E. Compilation fails

2. 
```
class TestA {
      private void TestA() {
            System.out.print("Test x ");
      }
      private TestA() {
            System.out.print("Test y ");
      }

      public static void main(String ar[]) {

            TestA a = new TestA();

            a.TestA();

      }

}
```

Which are true? (Choose all that apply.)
A. Compilation fails
B. The output is y x
D. The output is x y


3. Given Which statements about the following class are correct?
(Choose all that apply.)
```
1: public class PoliceBox {
2: String color;
3: long age;
4: public void PoliceBox() {
5: color = "blue";
6: age = 1200;
7: }
8: public static void main(String []time) {
9: var p = new PoliceBox();
10: var q = new PoliceBox();
11: p.color = "green";
```

```
12: p.age = 1400;
13: p = q;
14: System.out.println("Q1="+q.color);
15: System.out.println("Q2="+q.age);
16: System.out.println("P1="+p.color);
17: System.out.println("P2="+p.age);
18: } }
```
A. It prints Q1=blue.
B. It prints Q2=1200.
C. It prints P1=null.
D. It prints P2=1400.
E. Line 4 does not compile.
F. Line 12 does not compile.
G. Line 13 does not compile.
H. None of the above

4. Which of the following are correct? (Choose all that apply.)
A. A local variable of type boolean defaults to null.
B. A local variable of type float defaults to 0.0f.
C. A local variable of type double defaults to 0.
D. A local variable of type Object defaults to null.
E. A local variable of type boolean defaults to false.
F. A local variable of type float defaults to 0.0.
G. None of the above

5. Which of the following statements about garbage collection are
correct? (Choose all that apply.)
A. Calling System.gc() is guaranteed to free up memory by
destroying objects eligible for garbage collection.
B. Garbage collection runs on a set schedule.
C. Garbage collection allows the JVM to reclaim memory for other
objects.
D. Garbage collection runs when your program has used up half
the available memory.
E. An object may be eligible for garbage collection but never
removed from the heap.
F. An object is eligible for garbage collection once no
references to it are accessible in the program.
G. Marking a variable final means its associated object will
never be garbage collected.

6. Which of the following statements about var are true? (Choose
all that apply.)
A. A var can be used as a constructor parameter.
B. The type of var is known at compile time.
C. A var cannot be used as an instance variable.
D. A var can be used in a multiple variable assignment
statement.
E. The value of var cannot change at runtime.
F. The type of var cannot change at runtime.
G. The word var is a reserved word in Java.

7. Which of the following are valid instance variable declarations?
(Choose all that apply.)
A. var _ = 6000_.0;
B. var null = 6_000;
```

C. var $_ = 6_000;
D. var $2 = 6_000f;
E. var var = 3_0_00.0;
F. var #CONS = 2_000.0;
G. var %C = 6_000_L;
H. None of the above

8. Given:
1. enum Animals {
2. DOG("woof"), CAT("meow"), FISH("burble");
3. String sound;
4. Animals(String s) { sound = s; }
5. }
6. class TestEnum {
7. static Animals a;
8. public static void main(String[] args) {
9. System.out.println(a.DOG.sound + " " + a.FISH.sound);
10. }
11. }
What is the result?
A. woof burble
B. Multiple compilation errors
C. Compilation fails due to an error on line 2
D. Compilation fails due to an error on line 3
E. Compilation fails due to an error on line 4
F. Compilation fails due to an error on line 9

9. Given:
4. class Announce {
5. public static void main(String[] args) {
6. for(int __x = 0; __x < 3; __x++) ;
7. int #lb = 7;
8. long [] x [5];
9. Boolean []ba[];
10. }
11. }
What is the result? (Choose all that apply.)
A. Compilation succeeds
B. Compilation fails with an error on line 6
C. Compilation fails with an error on line 7
D. Compilation fails with an error on line 8
E. Compilation fails with an error on line 9

10.     Given:
3. public class TestDays {
4. public enum Days { MON, TUE, WED };
5. public static void main(String[] args) {
6. for(Days d : Days.values() )
7. ;
8. Days [] d2 = Days.values();
9. System.out.println(d2[2]);
10. }
11. }
What is the result? (Choose all that apply.)
A. TUE
B. WED
C. The output is unpredictable

D. Compilation fails due to an error on line 4
E. Compilation fails due to an error on line 6
F. Compilation fails due to an error on line 8
G. Compilation fails due to an error on line 9