

1. Given the following classes, what is the maximum number of imports that can be removed and have the code still compile?

```
package aquarium;

public class Water { }

package aquarium;

import java.lang.*;
import java.lang.System;
import aquarium.Water;
import aquarium.*;

public class Tank {

    public void print(Water water) {

        System.out.println(water);

    }

}
```

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. Does not compile.

Answer: E

2. Given the following classes, which of the following snippets can be inserted in place of INSERT IMPORTS HERE and have the code compile? (Choose all that apply)

```
package aquarium;

public class Water {

    boolean salty = false;

}

package aquarium.jellies;

public class Water {

    boolean salty = true;

}
```

```
package employee;
```

```
INSERT IMPORTS HERE
```

```
public class WaterFiller {
```

```
    Water water;
```

```
}
```

A. import aquarium.*;

B. import aquarium.Water;

```
    import aquarium.jellies.*;
```

C. import aquarium.*;

```
    import aquarium.jellies.Water;
```

D. import aquarium.*;

```
    import aquarium.jellies.*;
```

E. import aquarium.Water;

```
    import aquarium.jellies.Water;
```

F. None of these imports can make the code compile.

Answer: A,B,C

3. Given the following class, which of the following calls print out Blue Jay? (Choose all that apply)

```
public class BirdDisplay {
```

```
    public static void main(String[] name) {
```

```
        System.out.println(name[1]);
```

```
    }
```

```
}
```

A. java BirdDisplay Sparrow Blue Jay

B. java BirdDisplay Sparrow "Blue Jay"

C. java BirdDisplay Blue Jay Sparrow

D. java BirdDisplay "Blue Jay" Sparrow

E. java BirdDisplay.class Sparrow "Blue Jay"

F. java BirdDisplay.class "Blue Jay" Sparrow

G. Does not compile.

Answer: B

4. Which of the following are true? (Choose all that apply)

- A. An instance variable of type double defaults to null.
- B. An instance variable of type int defaults to null.
- C. An instance variable of type String defaults to null.
- D. An instance variable of type double defaults to 0.0.
- E. An instance variable of type int defaults to 0.0.
- F. An instance variable of type String defaults to 0.0.
- G. None of the above.

Answer: A,C

5. Given the following class in the file `/my/directory/named/A/Bird.java`:

INSERT CODE HERE

```
public class Bird { }
```

Which of the following replaces INSERT CODE HERE if we compile from `/my/directory`?

(Choose all that apply)

- A. `package my.directory.named.a;`
- B. `package my.directory.named.A;`
- C. `package named.a;`
- D. `package named.A;`
- E. `package a;`
- F. `package A;`
- G. Does not compile.

Answer: D

6. Which of the following are true? (Choose all that apply)

- A. An instance variable of type boolean defaults to false.
- B. An instance variable of type boolean defaults to true.
- C. An instance variable of type boolean defaults to null.
- D. An instance variable of type int defaults to 0.
- E. An instance variable of type int defaults to 0.0.
- F. An instance variable of type int defaults to null.
- G. None of the above.

Answer: A,D

7. What is the output of the following program?

```
1: public class WaterBottle {  
2:     private String brand;  
3:     private boolean empty;  
4:     public static void main(String[] args) {  
5:         WaterBottle wb = new WaterBottle();  
6:         System.out.print("Empty = " + wb.empty);  
7:         System.out.print(", Brand = " + wb.brand);  
8:     } }
```

- A. Line 6 generates a compiler error.
- B. Line 7 generates a compiler error.
- C. There is no output.
- D. Empty = false, Brand = null
- E. Empty = false, Brand =
- F. Empty = null, Brand = null

Answer: D

8. Which of the following are true? (Choose all that apply)

```
4: short numPets = 5;  
5: int numGrains = 5.6;  
6: String name = "Scruffy";  
7: numPets.length();  
8: numGrains.length();  
9: name.length();
```

- A. Line 4 generates a compiler error.
- B. Line 5 generates a compiler error.
- C. Line 6 generates a compiler error.
- D. Line 7 generates a compiler error.
- E. Line 8 generates a compiler error.
- F. Line 9 generates a compiler error.
- G. The code compiles as is.

Answer: B,D,E

9. Given the following class, which of the following is true? (Choose all that apply)

```
1: public class Snake {  
2:  
3:     public void shed(boolean time) {  
4:  
5:         if (time) {  
6:  
7:         }  
8:         System.out.println(result);  
9:  
10:    }  
11: }
```

- A. If String result = "done"; is inserted on line 2, the code will compile.
- B. If String result = "done"; is inserted on line 4, the code will compile.
- C. If String result = "done"; is inserted on line 6, the code will compile.
- D. If String result = "done"; is inserted on line 9, the code will compile.
- E. None of the above changes will make the code compile.

Answer: A,B

10. Given the following classes, which of the following can independently replace INSERT IMPORTS HERE to make the code compile? (Choose all that apply)

```
package aquarium;  
  
public class Tank { }  
  
package aquarium.jellies;  
  
public class Jelly { }
```

```
package visitor;
```

INSERT IMPORTS HERE

```
public class AquariumVisitor {
```

```
public void admire(Jelly jelly) { }  
}
```

- A. import aquarium.*;
- B. import aquarium.*.Jelly;
- C. import aquarium.jellies.Jelly;
- D. import aquarium.jellies.*;
- E. import aquarium.jellies.Jelly.*;
- F. None of these can make the code compile.

Answer:C,D