

1.How many of the following are legal declarations?

```
[]double lion;  
double[] tiger;  
double bear[];
```

- A. None
- B. One
- C. Two
- D. Three

2.How do you determine the number of elements in an array?

- A. buses.length
- B. buses.length()
- C. buses.size
- D. buses.size()

3.Which of the following create an empty two-dimensional array with dimensions 2x2?

- A. `int[][] blue = new int[2, 2];`
- B. `int[][] blue = new int[2], [2];`
- C. `int[][] blue = new int[2][2];`
- D. `int[][] blue = new int[2 x 2];`

4.How many lines does the following code output?

```
String[] days = new String[] { "Sunday", "Monday", "Tuesday",  
"Wednesday", "Thursday", "Friday", "Saturday" };  
for (int i = 0; i < days.length; i++)  
System.out.println(days[i]);
```

- A. Six
- B. Seven
- C. The code does not compile.
- D. The code compiles but throws an exception at runtime.

5.How many of the following are legal declarations?

```
String lion [] = new String[] {"lion"};  
String tiger [] = new String[1] {"tiger"};  
String bear [] = new String[] {};  
String ohMy [] = new String[0] {};
```

- A. None
- B. One
- C. Two
- D. Three

6. How many of the following are legal declarations?

```
float[] lion = new float[];  
float[] tiger = new float[1];  
float[] bear = new[] float;  
float[] ohMy = new[1] float;
```

- A. None
- B. One
- C. Two
- D. Three

7. Which line of code causes an ArrayIndexOutOfBoundsException?

```
String[][] matrix = new String[1][2];  
matrix[0][0] = "Don't think you are, know you are."; // m1  
matrix[0][1] = "I'm trying to free your mind Neo"; // m2  
matrix[1][0] = "Is all around you "; // m3  
matrix[1][1] = "Why oh why didn't I take the BLUE pill?"; // m4
```

- A. m1
- B. m2
- C. m3
- D. m4

8. Which is the first line to prevent this code from compiling and running without error?

```
char[][] ticTacToe = new char[3,3]; // r1  
ticTacToe[1][3] = 'X'; // r2  
ticTacToe[2][2] = 'X';  
ticTacToe[3][1] = 'X';  
System.out.println(ticTacToe.length + " in a row!"); // r3
```

- A. Line r1
- B. Line r2
- C. Line r3
- D. None of the above

9. How many of the following are legal declarations?

```
[][] String alpha;  
[] String beta;  
String[][] gamma;  
String[] delta[];  
String epsilon[][];
```

- A. Two
- B. Three
- C. Four
- D. Five

10. What is a possible output of the following code?

```
String[] strings = new String[2];  
System.out.println(strings);
```

- A. [null, null]
- B. [,]
- C. [Ljava.lang.String;@74a14482
- D. None of the above

10. What is the output of the following when run as java Count 1 2?

```
public class Count {  
    public static void main(String target[]) {  
        System.out.println(target.length);  
    }  
}
```

- A. 0
- B. 1
- C. 2
- D. The code does not compile.