1. What symbol is used for a varargs method parameter?
A. . .
B. . . .
C. --
D. ---

2. Fill in the blank in the following code to get the first element from the varargs
parameter.

```
public void toss (Frisbee... f) {
Frisbee first = ____________;
}
```

A. `f`
B. `f[0]`
C. `f[1]`
D. None of the above

3. Which of the following are primitives?

```
int[] lowercase = new int[0];
Integer[] uppercase = new Integer[0];
```

A. Only `lowercase`
B. Only `uppercase`
C. Bother `lowercase` and `uppercase`
D. Neither `lowercase` nor `uppercase`

4. How many of the following are legal declarations?

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

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

5. Given the following two methods, which method call will not compile?

```
public void printStormName(String... names) {
System.out.println(Arrays.toString(names));
}public void printStormNames(String[] names) {
System.out.println(Arrays.toString(names));
}
```

A. `printStormName("Arlene");`

B. `printStormName(new String[] { "Bret" });`

C. `printStormNames("Cindy");`

D. `printStormNames(new String[] { "Don" });`

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

A. `buses.length`

B. `buses.length()`

C. `buses.size`

D. `buses.size()`

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

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];`

8. 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.

9. What are the names of the methods to do searching and sorting respectively on
arrays?

A. `Arrays.binarySearch()` and `Arrays.linearSort()`
B. `Arrays.binarySearch()` and `Arrays.sort()`
C. `Arrays.search()` and `Arrays.linearSort()`
D. `Arrays.search()` and `Arrays.sort()`

10. What does this code output?

```
String[] nums = new String[] { "1", "9", "10" };
Arrays.sort(nums);
System.out.println(Arrays.toString(nums));
```

A. [1, 9, 10]
B. [1, 10, 9]
C. [10, 1, 9]
D. None of the above

11. Which of the following references the first and last element in a non-empty array?

A. `trains[0]` and `trains[trains.length]`
B. `trains[0]` and `trains[trains.length - 1]`
C. `trains[1]` and `trains[trains.length]`
D. `trains[1]` and `trains[trains.length - 1]`

12. 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

13. 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

14. Which statement most accurately represents the relationship between searching and
sorting with respect to the `Arrays` class?
A. If the array is not sorted, calling `Arrays.binarySearch()` will be accurate, but
slower than if it were sorted.
B. The array does not need to be sorted before calling `Arrays.binarySearch()` to get
an accurate result.
C. The array must be sorted before calling `Arrays.binarySearch()` to get an accurate
result.
D. None of the above

15. Which is not a true statement about an array?
A. An array expands automatically when it is full.
B. An array is allowed to contain duplicate values.
C. An array understands the concept of ordered elements.
D. An array uses a zero index to reference the first element.

16. 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`

17. What does the following output?

```
String[] os = new String[] { "Mac", "Linux", "Windows" };
Arrays.sort(os);
System.out.println(Arrays.binarySearch(os, "Mac"));
```

A. `0`
B. `1`
C. `2`
D. The output is not defined.

18. 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

19. How many objects are created when running the following code?

```
Integer[] lotto = new Integer[4];
lotto[0] = new Integer(1_000_000);
lotto[1] = new Integer(999_999);
```

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

20. 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