

Arrays Test 1

1. What is output by the following code segment?

```
int[] array = new int[3];  
array[0] = 10;  
array[1] = 20;  
array[2] = 30;  
System.out.println(array[1]);
```

- A) 1
- B) 10
- C) 20
- D) 30

2. What is output by the following code segment?

```
int[] array = {5, 10, 15, 20, 25};  
System.out.println(array[2]);
```

- A) 2
- B) 10
- C) 15
- D) 20

3. Look at the following code segment.

```
String [] list = /* initialization */;
```

Which of the following can replace `/* initialization */` so that the code creates an array that can store up to 10 String objects?

- A) `String[10]`
- B) `new String[10]`
- C) `list = 10`
- D) `new list(10)`

4. Look at the following code segment.

```
int[] nums = new int[5];           // Line1
nums[0] = 47;                       // Line2
nums[5] = 19;                       // Line3
System.out.println(nums[0]);        // Line4
```

Which of the lines above contains a run-time error? A run-time is an error that causes a program to stop execution.

- A) Line1
- B) Line2
- C) Line3
- D) Line4

5. What is output by the following code segment?

```
int[] arr = new int[5];
for (int j = 0; j < 5; j++)
{
    arr[j] = j;
}

for (int i = 0; i < 5; i++)
{
    System.out.print(arr[i] + " ");
}
```

- A) 0 0 0 0 0
- B) 0 1 2 3 4
- C) 1 2 3 4 5
- D) 5 5 5 5 5

6. What is output by the following code segment?

```
int[] array = new int[5];
array[0] = 5;
array[1] = 10;
array[2] = array[0] + array[1];
System.out.println(array[2]);
```

- A) 2
- B) 5
- C) 10
- D) 15

7. What is output by the following code segment?

```
int[] list = {-5, 7, 2, 15, -8, -1, 4};
int count = 0;
for (int j=0; j < list.length; j++)
{
    if (list[j] > 0)
        count++;
}
System.out.println(count);
```

- A) 0
- B) 3
- C) 4
- D) 7

8. Look at the following method declaration.

```
public void doSomething(int[] list)
{
    for (int i = 0; i < list.length; i++)
    {
        int num = list[i];
        if (num % 2 == 0)
            System.out.print(num + " ");
    }
}
```

Which of the following best describes what method `doSomething` does?

- A) Prints all the odd numbers in `list`.
- B) Prints all the even numbers in `list`.
- C) Prints all the positive numbers in `list`.
- D) Prints all the negative numbers in `list`.