

## 第四周复习

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建议 30 分钟内完成。

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### 一、判断题 共 3 小题

1. Instance methods in a class can also be overloaded. T
2. `__gcd` is a valid name of a variable. T
3. Static methods can be called without being instantiated. T

### 二、单项选择题 共 5 小题

1. Which of the following words is not a Java reserved word? D ..... ( )  
A. throw                      B. short                      C. extends                      D. instance
2. Which of the following is NOT a valid way to declare an array? C ..... ( )  
A. `int a = new int[12];`                      B. `char b[] = {'1'}`  
C. `long c = new long[2]{1L, 3L};`                      D. `boolean[] d; d = new boolean[2];`
3. What will the console output after executing the following statement? D  
`int t = 6;`  
`System.out.print(t++ + ++ t);` ..... ( )  
A. Occur Compile Error                      B. 12  
C. 13                      D. 14
4. The following is part of the code in the program. Which line of the statement will report a runtime error? D  
`byte i = 5;`  
`System.out.print((int) i);`  
`i = i + 1;` ..... ( )  
A. There is no error.                      B. Line 1  
C. Line 2                      D. Line 3
5. What will the console output after executing the following statement? C

```
char[] chars = new char[]{'1', '2', '3'};
```

```
System.out.println(chars); .....(    )
```

A. Occur Compile Error

B. Out-put the address of the array

C. 123

D. ['1', '2', '3']

### 三、简答题 共 1 小题

1. Now you are ask to recursively(递归地) approach a method to calculate factorial(阶乘) of a nonnegative integer n.

```
public static int factorial (int n) {  
    // implement your code here.  
} 略
```