

Java  
nested loop multiple choice worksheet #1

Name –

1. What output will be produced by this code segment? (Ignore spacing.)

```
for (int i = 5; i >= 1; i--)  
{  
    for (int j = i; j >= 1; j--)  
        System.out.print(2 * j - 1);  
    System.out.println();  
}
```

A.

```
9 7 5 3 1  
9 7 5 3  
9 7 5  
9 7  
9
```

B.

```
9 7 5 3 1  
7 5 3 1  
5 3 1  
3 1  
1
```

C.

```
9 7 5 3 1  
7 5 3 1 -1  
5 3 1 -1 -3  
3 1 -1 -3 -5  
1 -1 -3 -5 -7
```

D.

```
1  
1 3  
1 3 5  
1 3 5 7  
1 3 5 7 9
```

E.

```
1 3 5 7 9  
1 3 5 7  
1 3 5  
1 3  
1
```

2. Which of the following code segments will produce this output? (Ignore spacing.)

```
2 - - - -  
- 4 - - -  
- - 6 - -  
- - - 8 - -  
- - - - 10 -  
- - - - - 12
```

I.

```
for (int i = 1; i <= 6; i++)  
{  
    for (int k = 1; k <= 6; k++)
```

```
    if (k == i)
        System.out.print(2 * k);
    else
        System.out.print("-");
    System.out.println();
}
```

II.

```
for (int i = 1; i <= 6; i++)
{
    for (int k = 1; k <= i - 1; k++)
        System.out.print("-");
    System.out.print(2 * i);
    for (int k = 1; k <= 6 - i; k++)
        System.out.print("-");
    System.out.println();
}
```

III.

```
for (int i = 1; i <= 6; i++)
{
    for (int k = 1; k <= i - 1; k++)
        System.out.print("-");
    System.out.print(2 * i);
    for (int k = i + 1; k <= 6 - i; k++)
        System.out.print("-");
    System.out.println();
}
```

- A. I only
- B. II only
- C. III only
- D. I and II only
- E. I, II, and III