

Java  
for loop worksheet #2

Name –  
Period -

Trace the following loops showing the values stored in the loop variable `i` but circle the final value. Show **the output** as well but notice that the exercises use the `print` method rather than `println` so the output will be on one horizontal line. Write "error" or "infinite loop" where appropriate. Exercise #1 is completed as an example. Note that these code segments do not necessarily use good style since they don't have curly braces surrounding their body statements. The `++` operator adds one, the `--` operator subtracts one and the `%` operator means modulus (like `Mod` in VB).

1. i output:  
for (int i = 8; i > 1; i -= 2)  
    System.out.print(i + " ");

2. i output:  
for (int i = 0; i < 3; i++)  
    System.out.print(i + 1); // no space

3. i output:  
for (int i = 5; i > 1; i--)  
{  
    if (i == 2)  
        break;  
    System.out.print(i + " ");  
}

4. i output:  
for (int i = 1; i < 5; i++)  
{  
    if (i == 2)  
        continue;  
    System.out.print(i + " ");  
}

5. num i output:  
int num = 0;  
  
for (int i = 5; i > 0; i--)  
{  
    if (i % 2 == 1)  
        num += i;  
}  
  
System.out.print(num);

6. i output:  
for (int i = 1; i < 4; i++)  
    System.out.print(i + " ");  
    System.out.print("\nbye");

7. i output:  
for (int i = 0; i < 6; i = (i + 2) / 2)  
    System.out.print(i + 1); // no space