1. The sequence of statements that the program executes is called the ______ control flow ______. It also refers to the possible paths the program could take.

2. Loops are statements that will repeat a block of code. Java supports three explicit looping constructs. Name them:
   
   ________________
   while-loop, for-loop, do-while-loop

3. (True) or False (Circle one): The following algorithm computes the factorial $n!$ of an integer $n$:

   **Input:** Integer $n$
   1: $f \leftarrow 1$
   2: while $n > 0$ do
   3: $f \leftarrow f \times n$
   4: $n \leftarrow n - 1$
   5: Output($f$)

4. How many times does the following loop in Java execute? __________ 8

```java
int n = 50;
do {
    if(n % 2 == 0)
    n = n / 2;
    else
    n = n - 1;
} while(n > 0)
```

5. What is output by the following Java code? __________ 22

```java
int v = 42;
for(int i = 0; i < 5; ++i) {
    if(v % 3 == 0)
    v += 2;
    else if(v % 3 == 1)
    v /= 2;
    else
    v -= 1;
}
System.out.println(v);
```