Name: ____________________________

1. _________ Invoking _________ a method will execute the statements inside the method body.

2. True or (False) (Circle one): In Java, only int and doubles are passed-by-value to the formal parameters of a method when invoked.

3. Label the following items in the method signature below: method name, parameter list, privacy and memory context, and return type.

```java
//This function takes as input an integral value representing a character in ascii (International standard of the integer values of characters, e.g., //65 <= => 'A', 66 <= => 'B', etc.) and returns the character representation.

public static char AsciiValueToChar(short ascii);
```

“public static” – privacy and memory context
“char” – return type
“AsciiValueToChar” – method name
“short ascii” – parameter list

4. Creating multiple methods with the same name but different signatures is referred to as overloading _________.

5. _________ Scope _________ is the lifetime of a variable. In other words, it defines where in a program you are allowed to use a variable.

6. **Bonus.** Write a method in Java named foo that computes $a^b \mod n$, where $a$, $b$, and $n$ are integers and mod is an operator that computes the remainder. Do not worry about efficiency, assume $a^b$ does not cause integer overflow, and do not use Math.pow.

```java
public static int foo(int a, int b, int n) {
    int x = a;
    for(int i = 1; i < b; ++i)
        x *= a;
    return x % n;
}
```