# Chapter 18 Homework

1. True or false: To make recursion feasible, the recursion step in a recursive solution must resemble the original problem, but be a slightly smaller version of it.
   1. **True**
2. Iteration normally uses an iteration statement, whereas recursion normally uses a(n) \_\_\_\_ statement.
   1. **Selection Statement**
3. True or false: When a recursive method is called to solve a problem, it actually is capable of solving only the simple case(s) or base case(s).
   1. **True**
4. In the following recursive method, what is the base case?

static int recursiveMethod(int n) {

if (n == 1)

return 1;

else

return n + recursiveMethod(n - 1);

}

1. **N == 1**
2. A(n) \_\_\_\_ is needed to terminate recursion.
   1. **Termination test to identify the base case.**