1. What is a method?
   1. A named block of code that we can call on.
   2. A method is a named block of code. A sequence of statements in {}
2. (Not in book) What is the difference between a function and a procedure/sub procedure/subroutine?
   1. Function: Accepts input and transforms it into an output
   2. Procedure: A sequence of statements that you ask the computer to do in sequence.
   3. Subroutine: Tells the computer to do something and it works off of side effects.

3. What does a return statement do?

Tells what values to return when the method is finished executing

4. What is an expression bodied method?

A shortened way of writing a method without {}

5. What is the scope of a variable?

Where the variable is accessible. Local variables are only available within the scope they are created within.

6. What is an overloaded method?

Where you create the same method multiple times, but they take different parameters. The return type is not apart of the method.

7. How do you call a method that requires arguments?

myMethod (arg1, arg2)

8. How do you write a method, that is, specify the method definition, that requires a parameter list?

Method has return type, method name, parameter list, Body.

myMethod (int arg1, double arg2)

{

… //Some Code

}

9. How do you specify a parameter as optional when defining a method?

You make an optional parameter by pre assigning parameters within the method. If they aren’t used the default value is used.

10. How do you pass an argument to a method as a named parameter?

The Parameter name separated by semi colon. myMethod (first : 0.0, second : 1.0) The advantage is you can mix up the order of the parameters.

11. How do you return values from a method? Can you return multiple values from a method, and if so,

how?

We need to capture the returns within a local variable. You can supply a list of variables for multiple returns.

Int var1 var2 var3; (var1, var2, var3) = myMethod(var1, var2, var3)

12. What is a tuple? How do you define a method that returns multiple values? Give an example of a

method that returns multiple values other than the example in the book.

A tuple is simply a small collection of values (strictly speaking, a tuple contains two values, but C# tuples can comprise bigger sets than this)

int val1, val2

(val1, val2) = myMethod(…)

13. Examine the method definition on page 83 of the book. Desk check the execution of this method.

What do you discover? This is called recursion.

This is a loop that continues to run subtracting one from dataValue until it equals 1. It’s a recursive method because it calls on itself to accomplish this.

14. How does the compiler resolve an ambiguity between named arguments and optional parameters?

the version that most closely matches the method call