

Why I think that methods should be referred to as functions.

A method is a small chunk of code that performs a job. In the type of programming we have done so far – inline code – a method can be used to get rid of any repetitive coding. For instance, say that you needed to constantly find an average of 3 numbers for the program you were writing. If you created a method called `average()` that returned either a double or an integer, then you could just call it whenever you wanted to perform that job in your code. You would pass the three numbers as parameters (the stuff inside the parenthesis) and the method would return either an int or a double which was the average of the three numbers. You couldn't have it both ways you'd have to explicitly define the type of the method in the header. See example below where I define a method that will take 3 integer numbers as parameters and return a double which is the average of the three numbers:

```
public double average(int a, int b, int c) //this is the method header
{ // start block of code

    double ave;

    ave = (a+ b + c)/3.0 // note use of 3.0 to give a double

    return ave; // returns the average & exits
} // close block of code. End of method
```

This simplistic example would be placed after my main method.

The English definition for function I think more closely approximates what a method/function does in code. When it is used in inline code as we are doing now, it reveals that you are calling a separate code piece to handle some function that may come up many times. When it is used as part of the idea of an object as with Scanner objects, it reveals to us a behavior or “function” that a certain object can do once created. In the case of a Scanner object, it can grab an integer for us, it can grab a double for us, it can grab Strings for us. These are the behaviors or functions associated with a Scanner object.