**Writing Method Headers Review**

The first line of a method is called the method header. There are parts of it that are the same every time and there are parts that we need to change each time to reflect the information that is entering or leaving the method.

**Method header format public static <return type> methodName (parameter list)**

**Return type -** What the method is returning and can only be a single type of data. (int, double, boolean, String, etc..) If the method doesn't need to return anything, the return type is *void*.

**methodName** - What we call the method. This will be used elsewhere in the program, usually the main method, to make the code placed in the method be executed. Typically, the first word is lowercase and the subsequent words have their first letter capitalized.

**parameter list** - This is what data the method is expecting to be sent into it. You can have any number of variables sent into the method, however each one listed must be preceded by its type, such as double num, String st, etc… Also, when the method is called, the variables sent in must be in the same order as those specified in the method parameter list.

Example: We want to create a method called calculateTip, which receives two double values, the amount of the bill and the percentage you want to tip the server. It should return the amount of the tip, also as a double.

*public static double calculateTip (double billAmount, double tipPercentage)*

*{*

*return billAmount \* tipPercentage;*

*}*

**returning a double value name of method receiving two double values**

Assignment – On a separate sheet of paper, write the following methods. Remember the syntax for the header:

public static <return type> methodName (what is received)

1. Create a method called *calculatePay* that will receive the hours worked and hourly wage as doubles and return their gross pay as a double.

2. Create a method called *displayAge* that receives the user's name (String) and age (int) and outputs "<Name> is <age> years old."

3. Create a method called *isSameSign* that receives two integers and returns true of both numbers are positive or if both numbers are negative. Otherwise, it should return false.

4. Create a method called *getHobby* that asks the user for their favorite hobby and returns it as a String.

5. Create a method called *determineAbsoluteValue* that will receive an integer value and return its absolute value.

6. Create a method called *isExpelled* that receives the name of the student as a String, a boolean value for whether they've been suspended before and an integer value from 1-10 based on the severity of their offense. The method should return true if they've been suspended before and the severity of their offense is above 7. They are also expelled if their offense severity is 10, even if they haven't been suspended before. Otherwise, the method should return false.