

Method Parameters (or Arguments)

- Method *parameters* accept values from the method call
- The data that is passed can be used inside the method (do not use a new declaration)
- The parameter is passed by enclosing it in parentheses in the method call
- Separate multiple parameters by commas, order is important
- Argument names do not necessarily match parameter names

Ex) RightTriangle

```
public class RightTriangle {  
    public static void drawBar(int length) { drawBar expects the length  
        for (int i = 1; i <= length; i++) {  
            System.out.print("*");  
        }  
        System.out.println();  
    }  
  
    public static void main(String[] args) {  
        /* draw a right triangle with base size 6 */  
        for (int i = 1; i <= 6; i++) {  
            drawbar(i); this will make six calls  
                        to drawBar, each with  
                        one more * than the  
                        last call  
        }  
    }  
}
```

Output of RightTrianlge:

```
*  
**  
***  
****  
*****  
*****
```

The Return Statement

- A method can return a value
- Use the **return type** to specify int, double, String, etc.
- Use the **return statement** to send a value back to the calling statement (only once!)
- Set a variable equal to the method call using =

Example: the cubeOf() method returns the cube of its parameter

```
public class CubeCalculator {  
    public static double cubeOf(double x) {    returns a double!  
        double xCubed;  
        xCubed = x * x * x;  
        return(xCubed);  
    }  
    public static void main(String[] args) {  
        double num = 2.0;  
        double cube;  
  
        cube = cubeOf(num);  
        System.out.println(cube);    output: 8  
    }  
}
```

Programming Exercise:

Create a CountInSpanish application that displays numbers 1 through 10 in Spanish. A method with an int parameter should return the Spanish word for the number passed. A loop structure in the main() method should be used to call the method 10 times, and display the words.

FYI:

1 – uno, 2 – dos, 3 – tres, 4 – cuatro, 5 – cinco, 6 – seis, 7 – siete, 8 – ocho, 9 – nueve, 10 – diez

Submit your source code to the Google Doc “ICS4U – Activity Submission Form”