

BASIC SYNTAX (p 204)

```
modifiers returnType methodName (param list)
{
    METHOD BODY
}
```

modifiers for now, use public static

if the method does NOT RETURN A VALUE, IT IS OF TYPE VOID.

return statements MUST HAVE A VALUE UNLESS A VOID METHOD

each <sup>PARAMETER</sup> ~~argument~~ IN LIST MUST HAVE A TYPE

```
public static double fred (int a, int b)
{
    double average;
    average = (a+b)/2.0;
    return average;
}
```

parameters (under a, b)  
local variable (under average)  
return value (under return average)

```
public static double sue (double value)
{
    return Math.sqrt (fred (5, 7));
}
```

arguments (under 5, 7)  
method call (under fred (5, 7))

$x = b^y$   
 $\ln(x) = y \ln(b)$   
 $y = \ln(x) / \ln(b)$

```
public static double logB (double x, double b)
{
    return Math.log(x) / Math.log(b);
}
```

ARGUMENTS ARE PASSED BY VALUE (p212)

EXAMPLES

isPrime ( )  
Hex to DEC

OVERLOADING METHODS (p219)

VARIABLE SCOPE / NESTING RULES (p222)

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