Some Useful Mathematical Methods

Method	Function
`abs( arg )`	Returns the absolute value of the argument. Type returned is the same as the argument type.
`max( arg1, arg2 )`	Returns the larger of the two arguments. Each argument must be of the same type.
`min( arg1, arg2 )`	Returns the smaller of the two arguments. Each argument must be of the same type.
`PI`	The universal constant, PI. Type is `double`.
`pow( arg1, arg2 )`	Returns `arg1` raised to the power of `arg2`. The arguments and the return type are of type `double`.
`random()`	Returns a pseudo-random number in the range 0.0 to 1.0. The return type is `double`.
`rint( arg )`	Returns the nearest integer to the argument value. The argument and the return value are of type `double`.
`round( arg )`	Returns the nearest integer to the argument value. Returns type `int` for a `float` argument and returns `long` for a `double` argument.
`sqrt( arg )`	Returns the square root of the argument. The argument and the return value are of type `double`.

NOTE: These class methods are part of Java's built-in Math class. To use them you can either precede the method name with 'Math." (For example, Math.sqrt(x)) or place the statement 'import static java.lang.Math.*;' at the top of your source file. If you use the import statement you do not have to precede the method names with 'Math.'.

The above table contains some useful mathematical class methods that are part of the built-in Java Math class. There are many more methods in the Math class than appear above, but you might find some of these useful during your work in this course.

You can find a complete listing of the mathematical class methods at http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Math.html.