Testing Math 1.0
This document contains all the necessary information to execute the suite of tests for the package java.math.

In order to be able to perform the tests it is necessary to have the JDK – 1.5.0 (or superior) and Eclipse installed. Eclipse must be shaped with compliance for java 5.0

Later on, the projects TestingUltilities and MathJunitTesting of the cvs of testing must be obtained.

The tests can be executed individually by means of the plugin of JUnit of Eclicpse, the provided suite runner might also be used.

The tests are found in the package ar.org.fitc.test.math.main and they are divided as follows:

AllPerformanceTestsMath: it measures the execution time of every class, performing a specific number of iterations. In order to execute this test, first you will have to change the static variable "FILE NAME", that indicates the file on which the register of the test is stored. Then, there exists an "ITERATION" that indicates the number of iterations that it will realize per test (default = 50)

PerformanceTestMath: similar to the previous one, except that this one only measures the package times "ar.org.fitc.test.math".

PerformanceTestMathBigDecimal: similar to the previous one, but this one with the package "ar.org.fitc.test.math.bigdecimal".

PerformanceTestMathBigInteger: similar to the previous one, but this one with the package "ar.org.fitc.test.math.bigdecimal".

PerformanceTestMathBigIntegerMethods: similar to the previous one, but this one with the package "ar.org.fitc.test.math.biginteger.methods".

PerformanceTestMathIntegration: similar to the previous one, but this one with the package "ar.org.fitc.test.integration.math".

PerformanceTestMathMathContext: similar to the previous one, but this one with the package "ar.org.fitc.test.math.mathcontext".

LaunchAllTestsMath: it executes all the unit tests of the package java.math plus the integration test. To execute this test you will first have to change two static variables "RESULT_XML" and "RESULT_FAILED", which indicate the xml file path where the results an the testing failures are registered. This is essential since it is not the same for Linux than for Windows.

Note: the following folders must exist.

- C:\TestMath\Performance\
- C:\TestMath\ResultXML\
- C:\TestMath\Failed\
- C:\TestMath\IntegrationMath\

In case these folders do not exist, the path + the file name should be specified on the corresponding variables.

Important: on the package "**ar.org.fitc.test.integration.math**", in the Big class, there are 4 variables that you will have to set for it to match with the utilized operating system (in addition to the folders). These variables are called FILE1, FILE2, FILE3 and FILE4. It is at this point that the steps the tests follow and the final result of the operation are stored.