| | [**Overview**](http://docs.google.com/overview-summary.html) | **Package** | Class | [**Use**](http://docs.google.com/package-use.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV PACKAGE**](http://docs.google.com/java/lang/reflect/package-summary.html)   [**NEXT PACKAGE**](http://docs.google.com/java/net/package-summary.html) | [**FRAMES**](http://docs.google.com/index.html?java/math/package-summary.html)    [**NO FRAMES**](http://docs.google.com/package-summary.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

## Package java.math

Provides classes for performing arbitrary-precision integer arithmetic (BigInteger) and arbitrary-precision decimal arithmetic (BigDecimal).

**See:**

[**Description**](#3znysh7)

| **Class Summary** | |
| --- | --- |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html) | Immutable, arbitrary-precision signed decimal numbers. |
| [**BigInteger**](http://docs.google.com/java/math/BigInteger.html) | Immutable arbitrary-precision integers. |
| [**MathContext**](http://docs.google.com/java/math/MathContext.html) | Immutable objects which encapsulate the context settings which describe certain rules for numerical operators, such as those implemented by the [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) class. |

| **Enum Summary** | |
| --- | --- |
| [**RoundingMode**](http://docs.google.com/java/math/RoundingMode.html) | Specifies a *rounding behavior* for numerical operations capable of discarding precision. |

## Package java.math Description

Provides classes for performing arbitrary-precision integer arithmetic (BigInteger) and arbitrary-precision decimal arithmetic (BigDecimal). BigInteger is analogous to Java's primitive integer types except that it provides arbitrary precision, hence operations on BigIntegers do not overflow or lose precision. In addition to standard arithmetic operations, BigInteger provides modular arithmetic, GCD calculation, primality testing, prime generation, bit manipulation, and a few other miscellaneous operations. BigDecimal provides arbitrary-precision signed decimal numbers suitable for currency calculations and the like. BigDecimal gives the user complete control over rounding behavior, allowing the user to choose from a comprehensive set of eight rounding modes.

**Since:** JDK1.1

| | [**Overview**](http://docs.google.com/overview-summary.html) | **Package** | Class | [**Use**](http://docs.google.com/package-use.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV PACKAGE**](http://docs.google.com/java/lang/reflect/package-summary.html)   [**NEXT PACKAGE**](http://docs.google.com/java/net/package-summary.html) | [**FRAMES**](http://docs.google.com/index.html?java/math/package-summary.html)    [**NO FRAMES**](http://docs.google.com/package-summary.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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