| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/math/MathContext.html) | **Use** | [**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*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/math//class-useMathContext.html)    [**NO FRAMES**](http://docs.google.com/MathContext.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Class**

**java.math.MathContext**

| Packages that use [MathContext](http://docs.google.com/java/math/MathContext.html) | |
| --- | --- |
| [**java.math**](#3znysh7) | Provides classes for performing arbitrary-precision integer arithmetic (BigInteger) and arbitrary-precision decimal arithmetic (BigDecimal). |

| Uses of [MathContext](http://docs.google.com/java/math/MathContext.html) in [java.math](http://docs.google.com/java/math/package-summary.html) | |
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| Fields in [java.math](http://docs.google.com/java/math/package-summary.html) declared as [MathContext](http://docs.google.com/java/math/MathContext.html) | |
| --- | --- |
| static [MathContext](http://docs.google.com/java/math/MathContext.html) | **MathContext.**[**DECIMAL128**](http://docs.google.com/java/math/MathContext.html#DECIMAL128)            A MathContext object with a precision setting matching the IEEE 754R Decimal128 format, 34 digits, and a rounding mode of [HALF\_EVEN](http://docs.google.com/java/math/RoundingMode.html#HALF_EVEN), the IEEE 754R default. |
| static [MathContext](http://docs.google.com/java/math/MathContext.html) | **MathContext.**[**DECIMAL32**](http://docs.google.com/java/math/MathContext.html#DECIMAL32)            A MathContext object with a precision setting matching the IEEE 754R Decimal32 format, 7 digits, and a rounding mode of [HALF\_EVEN](http://docs.google.com/java/math/RoundingMode.html#HALF_EVEN), the IEEE 754R default. |
| static [MathContext](http://docs.google.com/java/math/MathContext.html) | **MathContext.**[**DECIMAL64**](http://docs.google.com/java/math/MathContext.html#DECIMAL64)            A MathContext object with a precision setting matching the IEEE 754R Decimal64 format, 16 digits, and a rounding mode of [HALF\_EVEN](http://docs.google.com/java/math/RoundingMode.html#HALF_EVEN), the IEEE 754R default. |
| static [MathContext](http://docs.google.com/java/math/MathContext.html) | **MathContext.**[**UNLIMITED**](http://docs.google.com/java/math/MathContext.html#UNLIMITED)            A MathContext object whose settings have the values required for unlimited precision arithmetic. |

| Methods in [java.math](http://docs.google.com/java/math/package-summary.html) with parameters of type [MathContext](http://docs.google.com/java/math/MathContext.html) | |
| --- | --- |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**abs**](http://docs.google.com/java/math/BigDecimal.html#abs(java.math.MathContext))([MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is the absolute value of this BigDecimal, with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**add**](http://docs.google.com/java/math/BigDecimal.html#add(java.math.BigDecimal,%20java.math.MathContext))([BigDecimal](http://docs.google.com/java/math/BigDecimal.html) augend, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (this + augend), with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**divide**](http://docs.google.com/java/math/BigDecimal.html#divide(java.math.BigDecimal,%20java.math.MathContext))([BigDecimal](http://docs.google.com/java/math/BigDecimal.html) divisor, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (this / divisor), with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html)[] | **BigDecimal.**[**divideAndRemainder**](http://docs.google.com/java/math/BigDecimal.html#divideAndRemainder(java.math.BigDecimal,%20java.math.MathContext))([BigDecimal](http://docs.google.com/java/math/BigDecimal.html) divisor, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a two-element BigDecimal array containing the result of divideToIntegralValue followed by the result of remainder on the two operands calculated with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**divideToIntegralValue**](http://docs.google.com/java/math/BigDecimal.html#divideToIntegralValue(java.math.BigDecimal,%20java.math.MathContext))([BigDecimal](http://docs.google.com/java/math/BigDecimal.html) divisor, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is the integer part of (this / divisor). |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**multiply**](http://docs.google.com/java/math/BigDecimal.html#multiply(java.math.BigDecimal,%20java.math.MathContext))([BigDecimal](http://docs.google.com/java/math/BigDecimal.html) multiplicand, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (this × multiplicand), with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**negate**](http://docs.google.com/java/math/BigDecimal.html#negate(java.math.MathContext))([MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (-this), with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**plus**](http://docs.google.com/java/math/BigDecimal.html#plus(java.math.MathContext))([MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (+this), with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**pow**](http://docs.google.com/java/math/BigDecimal.html#pow(int,%20java.math.MathContext))(int n, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (thisn). |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**remainder**](http://docs.google.com/java/math/BigDecimal.html#remainder(java.math.BigDecimal,%20java.math.MathContext))([BigDecimal](http://docs.google.com/java/math/BigDecimal.html) divisor, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (this % divisor), with rounding according to the context settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**round**](http://docs.google.com/java/math/BigDecimal.html#round(java.math.MathContext))([MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal rounded according to the MathContext settings. |
| [BigDecimal](http://docs.google.com/java/math/BigDecimal.html) | **BigDecimal.**[**subtract**](http://docs.google.com/java/math/BigDecimal.html#subtract(java.math.BigDecimal,%20java.math.MathContext))([BigDecimal](http://docs.google.com/java/math/BigDecimal.html) subtrahend, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Returns a BigDecimal whose value is (this - subtrahend), with rounding according to the context settings. |

| Constructors in [java.math](http://docs.google.com/java/math/package-summary.html) with parameters of type [MathContext](http://docs.google.com/java/math/MathContext.html) | |
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| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(java.math.BigInteger,%20int,%20java.math.MathContext))([BigInteger](http://docs.google.com/java/math/BigInteger.html) unscaledVal, int scale, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates a BigInteger unscaled value and an int scale into a BigDecimal, with rounding according to the context settings. |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(java.math.BigInteger,%20java.math.MathContext))([BigInteger](http://docs.google.com/java/math/BigInteger.html) val, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates a BigInteger into a BigDecimal rounding according to the context settings. |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(char%5B%5D,%20int,%20int,%20java.math.MathContext))(char[] in, int offset, int len, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates a character array representation of a BigDecimal into a BigDecimal, accepting the same sequence of characters as the [BigDecimal.BigDecimal(String)](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(java.lang.String)) constructor, while allowing a sub-array to be specified and with rounding according to the context settings. |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(char%5B%5D,%20java.math.MathContext))(char[] in, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates a character array representation of a BigDecimal into a BigDecimal, accepting the same sequence of characters as the [BigDecimal.BigDecimal(String)](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(java.lang.String)) constructor and with rounding according to the context settings. |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(double,%20java.math.MathContext))(double val, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates a double into a BigDecimal, with rounding according to the context settings. |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(int,%20java.math.MathContext))(int val, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates an int into a BigDecimal, with rounding according to the context settings. |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(long,%20java.math.MathContext))(long val, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates a long into a BigDecimal, with rounding according to the context settings. |
| [**BigDecimal**](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(java.lang.String,%20java.math.MathContext))([String](http://docs.google.com/java/lang/String.html) val, [MathContext](http://docs.google.com/java/math/MathContext.html) mc)            Translates the string representation of a BigDecimal into a BigDecimal, accepting the same strings as the [BigDecimal.BigDecimal(String)](http://docs.google.com/java/math/BigDecimal.html#BigDecimal(java.lang.String)) constructor, with rounding according to the context settings. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/math/MathContext.html) | **Use** | [**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*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/math//class-useMathContext.html)    [**NO FRAMES**](http://docs.google.com/MathContext.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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