

MDX Reference

This section lists the MDX functions and operators allowed in a calculated measure formula.

- [ABS](#) The ABS function returns the absolute value of the argument.
- [AGGREGATE](#) The AGGREGATE function Returns a number that is calculated by aggregating over the ce the set expression.
- [ALL](#) Refers to the All level with a single member called the All member. Used to constrain a tuple expr
- [ANCESTOR](#) A function that returns the ancestor of a specified member at a specified level or at a sp from the member.
- [Arithmetic Operators \(MDX\)](#) Arithmetic operators perform basic math operations on their operands. A arithmetic operators in *Calculated Measure* formulas. Notice the NULL handling behavior in MDX is d SQL.
- [AVG](#) The AVG function returns the average of a Measure evaluated over a given set.
- [CASE](#) The CASE function evaluates each row in the dataset according to one or more input conditions specified result when the input conditions are met.
- [CBOOL](#) Casts the value to a Boolean.
- [CDBL](#) Casts the value to a Double.
- [CDEC](#) Casts the value to a Decimal number.
- [CEILING](#) The CEILING function returns the smallest integer value greater than or equal to the argumen
- [CHILDREN](#) Returns a naturally ordered set that contains the children of a specified member.
- [CINT](#) Casts the value to an Integer.
- [CLONG](#) Casts the value a Long.
- [Comparison Operators \(MDX\)](#) Comparison operators evaluate to a Boolean data type, returning true the outcome of the tested condition.
- [COUNT](#) The COUNT function returns the size of a given set.
- [CSTR](#) Casts the value to a String.
- [CURRENTMEMBER.NAME](#) The CURRENTMEMBER.NAME function returns the current member value of the s dimension attribute during iteration.
- [DatesPeriodsToDate](#) Returns the set of dates corresponding to the range of Day members beginning sibling member of Level_Expression and ending on the member described by Member_Expression.
- [DatesMTD](#) An alias for DatesPeriodsToDate with the Level_Expression argument dynamically set to the Mon Member_Expression argument's Time hierarchy.
- [DatesQTD](#) An alias for DatesPeriodsToDate with the Level_Expression argument dynamically set to the Quar Member_Expression argument's Time hierarchy.
- [DatesWTD](#) An alias for DatesPeriodsToDate with the Level_Expression argument dynamically set to the Wee Member_Expression argument's Time hierarchy.
- [DatesYTD](#) An alias for DatesPeriodsToDate with the Level_Expression argument dynamically set to the Year Member_Expression argument's Time hierarchy.
- [DAY](#) Returns the day of month from the Date or DateTime measure as an integer.
- [DESCENDANTS](#) Returns the set of descendants of a member at a specified level or distance, optiona excluding descendants in other levels.

- [DIMENSION UNIQUE NAME](#) The unique name of the dimension to which this member belongs.
- [DIVIDE](#) Performs division and returns alternate result or BLANK() on division by zero.
- [E](#) Returns the value of mathematical constant e.
- [EXP](#) Returns the mathematical constant e raised to the specified power.
- [FIRSTCHILD](#) Returns the first child of an input member.
- [FIRSTSIBLING](#) Returns the first child of the parent of a member, otherwise known as the member's first child.
- [FLOOR](#) The FLOOR function returns the largest integer value less than or equal to the argument.
- [HIERARCHY_UNIQUE_NAME](#) The unique name of the hierarchy to which this member belongs.
- [HOUR](#) Returns the hour of day component of a DateTime or Timestamp measure as an integer.
- [IIF](#) The IIF function evaluates one of two different expressions, depending on whether a Boolean condition is true or false.
- [INSTR](#) The Instr function returns the position of the first occurrence of one string within another string.
- [ISEMPTY](#) The ISEMPTY function evaluates if a cell in a cube is empty or not.
- [KEY](#) The value of the member key in the original data type.
- [LAG](#) The LAG function returns a member that precedes the specified member by a specified number of levels.
- [LASTCHILD](#) Returns the last child of a specified member.
- [LASTSIBLING](#) Returns the last child of the parent of a member, otherwise known as the member's last child.
- [LEAD](#) The LEAD function returns a member that follows the specified member by a specified number of levels.
- [LEFT](#) The LEFT function returns a string of a specified number of characters from the left side of a specified string.
- [LEN](#) Returns a Long containing the number of characters in a string or the number of bytes required to store the string in a variable.
- [LEVEL](#) Returns the Name of a dimension member's Level.
- [LEVEL_NUMBER](#) The distance of the member from the root of the hierarchy.
- [LEVEL_UNIQUE_NAME](#) The unique name of the level to which the member belongs.
- [LOG](#) Returns the base x logarithm of the argument.
- [LOG2](#) Returns the base 2 logarithm of the argument.
- [LOG10](#) Returns the base 10 logarithm of the argument.
- [Logical Operators \(MDX\)](#) Logical operators are used to combine arguments in a Boolean expression (that evaluates to true or false).
- [MAX](#) The MAX function returns the max of a Measure evaluated over a given set.
- [MEMBER_CAPTION](#) A label or caption associated with the member. The caption is primarily for display purposes.
- [MEMBER_KEY](#) The value of the member key in the original data type.
- [MEMBER_LEVEL_NUMBER](#) The distance of the member from the root of the hierarchy.
- [MEMBER_NAME](#) The name of the member.
- [MID](#) The MID function returns a substring of a string argument.
- [MIN](#) The MIN function returns the min of a Measure evaluated over a given set.
- [MINUTE](#) Returns the minute of hour component of a DateTime or Timestamp measure as an integer.
- [MONTH](#) Returns the Month component of a Date or DateTime measure as an integer.
- [NEXTMEMBER](#) The NEXTMEMBER function returns the member that follows the specified member in the hierarchy.
- [NOW](#) Returns the DateTime from the data warehouse.

- [PARALLELPERIOD](#) The PARALLELPERIOD function returns a member from the same relative position in a hierarchy as the specified member.
- [PARENT](#) Returns the parent member of the specified member.
- [PARENT_COUNT](#) The number of parents that this member has.
- [PARENT_LEVEL](#) The distance of the member's parent from the root level of the hierarchy.
- [PERIODSTODATE](#) The PERIODSTODATE function returns a set of sibling members from the specified level in a dimension, beginning with the first sibling and ending with a specified member.
- [PI](#) Returns the value of mathematical constant Pi.
- [POW](#) Returns a base raised to a power.
- [PREVMEMBER](#) The PrevMember function returns the member that precedes the specified member in the hierarchy.
- [PROPERTIES](#) Returns the value of the specified member for the specified member property.
- [RAND](#) - Returns a random number between 0 and 1 based on an optional seed.
- [RIGHT](#) - The Right function returns a string of a specified number of characters from the right side of a string.
- [ROUND](#) - Round a number to an integer or the specified number of fractional digits.
- [SECOND](#) Returns the second of minute component of a DateTime or Timestamp measure as an integer.
- [Set Operators \(MDX\)](#) Set operators perform operations on members or sets, and return a set.
- [SIBLINGS](#) Returns the siblings of a member, including the member.
- [SIGN](#) The SIGN function returns -1, 1, or 0 if the sign of the argument is either negative, positive, or unknown.
- [SQLSUM](#) The SQLSUM function returns the sum of its arguments.
- [SUM](#) The SUM function returns the sum of a Measure evaluated over a given set.
- [Trigonometric Functions](#) AtScale supports the following MDX trigonometric functions in a calculated member formula.
- [TRIM | LTRIM | RTRIM](#) The TRIM function removes both leading and trailing spaces from the specified string; LTRIM removes just leading spaces, and RTRIM removes just trailing spaces.
- [TRUNCATE](#) Returns the integral component of a floating-point or fixed-precision number.
- [Tuple Expressions](#) AtScale supports simple cube-sided tuple expressions for calculated measures.
- [UCASE | LCASE](#) The UCASE converts all alphabetic characters in a string to all upper case. LCASE converts all alphabetic characters in a string to all lower case.
- [VBA Date Functions](#) Enable you to create default hierarchical members on time hierarchies; for example, the next date or previous year.
- [YEAR](#) Returns the Year component of a Date or DateTime measure as an integer.