

## Time MDX Cheat Sheet

<p><b>How do you get Last month in the time dimension</b></p> <pre>SELECT ClosingPeriod([Date].[Calendar].[Month], [Date].[Calendar].DefaultMember) ON 0 FROM [Sales Summary] WHERE ([Measures].[Sales Amount]);</pre>	<p><b>Need a MDX query that returns list of months from start of year up to specified month.</b></p> <pre>SELECT YTD([Date].[Calendar].[Month].&amp;[2003]&amp;[8]) ON 0 FROM [Sales Summary];</pre>
<p><b>I Need an MDX statement to show the first day of the last month in the cube</b></p> <pre>SELECT OpeningPeriod([Date].[Calendar].[Date] , ClosingPeriod([Date].[Calendar].[Month], [Date].[Calendar].DefaultMember) ) ON 0 FROM [Sales Summary]</pre>	<p><b>How in the report can I order date dimension members in descending order?</b></p> <pre>SELECT {[Measures].[Reseller Order Quantity]} ON 0 , ORDER(Tail([Date].[Calendar].[Calendar Year].Members, 3) , [Date].[Calendar].CurrentMember.Member_Key, DESC ) ON 1 FROM [Adventure Works]</pre>
<p><b>I Need an MDX statement to get the last Month loaded into a cube</b></p> <pre>SELECT ClosingPeriod([Date].[Calendar].[Month], [Date].[Calendar].DefaultMember) ON 0 FROM [Sales Summary];</pre>	<p><b>I Need an MDX statement to get the first month of the last year loaded into a cube</b></p> <pre>SELECT OpeningPeriod([Date].[Calendar].[Month] , ClosingPeriod([Date].[Calendar].[Calendar Year], [Date].[Calendar].DefaultMember) ) ON 0 FROM [Sales Summary];</pre>
<p><b>How do you write MDX query that uses execution date/time as a parameter?</b></p> <pre>SELECT {[Measures].[Internet Order Count]} ON 0 , {StrToMember("[Date].[Date].[" + Format(now(), "MMMM dd, yyyy") + "]} } ON 1 FROM [Direct Sales];</pre>	
<p><b>Need MDX Query to get latest months and previous years same months data</b></p> <pre>SELECT {ClosingPeriod([Date].[Calendar].[Month], [Date].[Calendar].DefaultMember) , ParallelPeriod([Date].[Calendar].[Calendar Year] , 1 , ClosingPeriod([Date].[Calendar].[Month], [Date].[Calendar].DefaultMember) ) } ON 0 FROM [Sales Summary];</pre>	<p><b>I need an MDX query to show year level data for all years except the last one, and month level data for the last year.</b></p> <pre>SELECT {NULL: ClosingPeriod([Date].[Calendar].[Calendar Year], [Date].[Calendar].DefaultMember).PrevMember , DESCENDANTS(ClosingPeriod([Date].[Calendar].[Calendar Year], [Date].[Calendar].DefaultMember) , [Date].[Calendar].[Month]) } ON 0 FROM [Sales Summary];</pre>
<p><b>How to create calculated member for AVG sales over last 3 years based on NOW()??</b></p> <pre>CREATE MEMBER CurrentCube.Measures.[Avg3Years] AS Avg( {ParallelPeriod( [Date].[Date].[Date Yr], 3, StrToMember("[Date].[Date].&amp;[" + Format(now(), "yyyyMMdd") + ""])} : StrToMember("[Date].[Date].&amp;[" + Format(now(), "yyyyMMdd") + ""])} , [Measures].[Sales Qty] ) ;</pre>	<p><b>How do I calculate sales for 12 Month to date in MDX?</b></p> <pre>WITH MEMBER [Measures].[Last 12 Mth Order Count] AS SUM( ClosingPeriod([Date].[Calendar].[Month], [Date].[Calendar].[All Periods]).Lag(12) : ClosingPeriod([Date].[Calendar].[Month], [Date].[Calendar].[All Periods]) , [Measures].[Order Count]) SELECT [Measures].[Last 12 Mth Order Count] ON 0 FROM [Adventure Works]</pre>
<p><b>How can I get Last (Previous) Year to Date (YTD) values?</b></p> <pre>WITH MEMBER [Measures].[Current YTD] AS SUM(YTD([Date].[Calendar].CurrentMember), [Measures].[Internet Order Quantity]) MEMBER [Measures].[Last YTD] AS SUM(YTD(ParallelPeriod([Date].[Calendar].[Calendar Year] , 1 , [Date].[Calendar].CurrentMember)) , [Measures].[Internet Order Quantity] ) SELECT {[Measures].[Current YTD] , [Measures].[Last YTD] } ON 0 FROM [Adventure Works] WHERE ([Date].[Calendar].[Date].[March 22, 2004])</pre>	<p><b>MDX query to get count of months with sales amount &gt; 0 in defined period</b></p> <pre>WITH Member [Measures].[Months With Above Zero Sales] AS COUNT(FILTER( DESCENDANTS([Date].[Calendar].[Calendar Year].&amp;[2003]: [Date].[Calendar].[Calendar Year].&amp;[2004]) , [Date].[Calendar].[Month]) , [Measures].[Sales Amount] &gt; 0 ) ) SELECT {[Measures].[Sales Amount], [Measures].[Months With Above Zero Sales]} ON 0 , [Product].[Product Model Lines].[Product Line].Members on 1 FROM [Adventure Works] WHERE ([Date].[Calendar].[Calendar Year].&amp;[2003]: [Date].[Calendar].[Calendar Year].&amp;[2004]);</pre>
<p><b>How do you calculate monthly average of a year?</b></p> <pre>WITH MEMBER [Measures].[AvgVal] AS Avg( Descendants([Date].[Calendar].[Calendar Year].&amp;[2004] , [Date].[Calendar].[Month]) , [Measures].[Internet Order Count] ) SELECT {[Measures].[AvgVal]} ON 0 FROM [Adventure Works] WHERE ([Product].[Product Model Lines].[Model Name].&amp;[Classic Vest])</pre>	<p><b>How do you calculate monthly average of a year including empty months?</b></p> <pre>WITH MEMBER [Measures].[AvgVal] AS Avg( Descendants([Date].[Calendar].[Calendar Year].&amp;[2004] , [Date].[Calendar].[Month]) , CoalesceEmpty([Measures].[Internet Order Count], 0) ) SELECT {[Measures].[AvgVal]} ON 0 FROM [Adventure Works] WHERE ([Product].[Product Model Lines].[Model Name].&amp;[Classic Vest])</pre>

