

# TABLEAU'S TOP 5 DATE CALCULATIONS

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# 1.DATEADD

The DATEADD function increases or decreases the date given by the increment you specify. For example you can have a field called "Date" and increase/decrease that date by a certain amount of years, months, days, etc. In this example I decreased the "Date" field by 3 months.

#### DATEADD

DATEADD('month', -3, [Date])

Month of Date	Month of DATEADD
January 2016	October 2015
February 2016	November 2015
February 2017	November 2016

## 2.DATEDIFF

The DATEDIFF function finds the difference of two dates in the units you specify. In the example below we took the difference of "Date" and "DATEADD" which we know is negative 3 months. Using the DATEDIFF calculation we get the difference of the two as an integer.

DATEDIFF

DATEDIFF('month', [Date], [DATEADD])

Month of Date	Month of DATEADD	
January 2016	October 2015	-3
February 2016	November 2015	-3
February 2017	November 2016	-3

### 3.DATETRUNC

The DATETRUNC calculations is used to truncate part of the date. A good way to think about this is the date rounds down to the level you specify. For example you can round down a day to the month, a month to the quarter or a day to the year...etc. In the example below we are rounding the month down to the quarter

DATETRUNC
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DATETRUNC('quarter',[Last Call Date])

Month of Last Call Date	Day of DATETRUNC
June 2015	April 1, 2015
July 2015	July 1, 2015
August 2015	July 1, 2015
September 2015	July 1, 2015
October 2015	October 1, 2015
November 2015	October 1, 2015
December 2015	October 1, 2015
January 2016	January 1, 2016
February 2016	January 1, 2016
March 2016	January 1, 2016
April 2016	April 1, 2016
May 2016	April 1, 2016
June 2016	April 1, 2016
July 2016	July 1, 2016
August 2016	July 1, 2016
September 2016	July 1, 2016
October 2016	October 1, 2016
November 2016	October 1, 2016
December 2016	October 1, 2016
January 2017	January 1, 2017

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### 4. MAKEDATE

The MAKEDATE function is used when you need to convert integers into a date dimension that Tableau recognize. You will need to consolidate the seperate columns into one date column in order for Tableau to recognize it as a Date. In the example below you will see we have Year, Month and Day as integers and brought those together to create a Tableau Date calculation that can be used as a regular date field.

Month	Day	Year	Day of MAKEDATE
2	16	2008	February 16, 2008
3	6	2002	March 6, 2002
5	9	2001	May 9, 2001
	14	2016	May 14, 2016
6	5	2000	June 5, 2000
7	25	2015	July 25, 2015
8	8	2005	August 8, 2005
12	25	2017	December 25, 2017

MAKEDATE

#### MAKEDATE([Year], [Month], [Day])

Dim	ensions III P 🔻	,
# (	Day	
-#	MAKEDATE	
#	Month	
#	Year	
Abc	Measure Names	

### 5.TODAY

The TODAY function returns todays date. This is really helpful when you need to create a dynamic calculation that depends on the current date. A great example of this is when you need to create an AGE calculation. Instead of calculating the age of someone from a specific date you can create a calculation where it always looks at today's date so the AGE field is always accurate. Below is an example of how you can use the DATEDIFF and the TODAY function to create a continuously updated AGE field.

#### AGE

DATEDIFF('year', [Birthday], TODAY())

Day of Birthday	AGE
June 5, 2000	17
May 9, 2001	16
March 6, 2002	15
August 8, 2005	12
February 16, 2008	9
July 25, 2015	2
May 14, 2016	1
December 25, 2017	0

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