

Lesson 3 More on Days Feature

NETWORKDAYS

NETWORKDAYS – returns the number of whole working days between two dates.

Syntax – Date and End Date are valid dates.

Holidays is an optional range of one or more dates to exclude from the working calendar. The list can be either a range of cells that contains the dates or an array constant of the serial numbers that represent the dates.

Equation	Result	Notes
=NETWORKDAYS(A1, A2)	5	A1 = 02/27/2009, A2 = 03/05/2009
=NETWORKDAYS(B1, B2)	1	B1 = 01/30/2009, B2 = 02/01/2009
=NETWORKDAYS(C1, C2)	12	C1 = 07/01/2009, C2 = 07/15/2009
=NETWORKDAYS(C1, C2, C3)	11	C1 = 07/01/2009, C2 = 07/15/2009, C3 = 07/04/1999
=NETWORKDAYS(D1, D2, D3:D4)	259	D1 = 11/15/2009, D2 = 11/15/2010, D3 = 01/01/2010, D4 = 07/04/2010

WEEKDAY

WEEKDAY – Returns the day of the week corresponding to a date.

Syntax = WEEKDAY (serial number return _ type)

Serial Number is the date of the day you are trying to find.

Return Type is a number that determines the type of return value. 1 or omitted sees the week as 1-Sunday, 7-Saturday, 2 sees the week as 1=Monday, 7-Sunday, 3 sees the week as 1-Monday, 6-Sunday.

Equation	Result	Notes
=WEEKDAY("12/15/1976")	4	Wednesday, December 15, 1976
=WEEKDAY(40622)	1	Sunday, March 20, 2011
=WEEKDAY(A1)	7	A1 = Saturday, October 28, 1905

WEEKNUM – Returns the day of the week corresponding to a date.

Syntax = WEEKNUM (serial number, return_type)

Serial Number is the date of the day you are trying to find.

Return Type is a number that determines the type of return value 1- Week begins on Sunday.

Weekdays are numbered 1 through 7, 2 Week begins on Monday, Weekdays are numbered 1 through 7.

Remarks: The **WEEKNUM** function considers the week containing January 1 to the first week of the year.

Equation	Result	Notes
=WEEKNUM("12/15/1976")	51	Wednesday, December 15, 1976
=WEEKNUM(40622)	13	Sunday, March 20, 2011
=WEEKNUM(A1)	43	A1 = Saturday, October 28, 1905

WORKDAY – Returns a date that is a number of working days before or after a date.

Syntax – **WORKDAY** (start date, days holidays)

Start Date is a valid date that represents the starting date.

Days is the number of non-weekend and non-holiday days before or after start_date. A positive value yields a future date, a negative value, a past date.

Holidays in an optional range of one or more dates to exclude from the working calendar. The list can be either a range of cells that contains the dates or an array constant of the serial numbers that represent the dates.

Equation	Result		Notes
=WORKDAY(A1, 1)	39874	Mon 3/2/09	A1 = 02/27/2009
=WORKDAY(A1, 10)	39885	Fri 3/13/09	A1 = 02/27/2009
=WORKDAY(A1, 100)	40011	Fri 7/17/09	A1 = 02/27/2009
=WORKDAY(C1, 100, C3)	40135	Wed 11/18/09	C1 = 07/01/2009, C2 = 07/04/2009
=WORKDAY(D1, D2, D3:D4)	40274	Tue 4/6/10	D1 = 11/15/09, D2 = 100, D3 = 1/1/10, D4 = 1/18/10

YEAR– Returns the numeric value of the year in a valid date.

Syntax=YEAR(serial number)

Serial number is the date of the year you are trying to find.

Equation	Result	Notes
=YEAR("10/15/1905")	5	
=YEAR(40622)	2011	Equivalent to 3/20/2011
=YEAR(A1)	1976	A1 = 12/5/1976

YEARFRAC – Return fraction of the year of the number of whole days between two dates.

Syntax – **YEARFRAC**(start_date, and end_date, basic)

Start Date and End Date are valid dates which represents the starting and ending dates.

Basis is the type of day count basis to use.

0-US/NASD 30/30,1-Actual/Actual, 2-Actual/360,3- Actual/365,4- European 30/360

Equation	Result	Notes
=YEARFRAC(A1, A2)	1	A1 = 1/1/2009, A2 = 1/1/2010
=YEARFRAC(A1, A3)	1.013888889	A1 = 1/1/2009, A3 = 1/1/2010
=YEARFRAC(A1, A4)	0.455555556	A1 = 1/1/2009, A4 = 6/15/2009
=YEARFRAC(A1, A5)	0.538888889	A1 = 1/1/2009, A5 = 7/15/2009
=YEARFRAC(A1, A6)	13.53888889	A1 = 1/1/2009, A6 = 7/15/2022

Questions

1. Explain how the following are listed in the date feature:

YEARFRAC

WEEKNUM

WEEKDAY

NETWORKDAYS