### Highline Excel 2016 Class 09: Date Functions

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#### **Date Functions**

- 1) TODAY function shows today's date (whole number)
- 2) NOW function shows today's date and time (whole number & decimal)
- 3) YEAR function looks at a date and tells you what year it is. Example YEAR(1/1/2005) = 2005
- 4) MONTH function looks at a date and tells you what month it is. Example MONTH(1/1/2005) = 1
- DAY function looks at a date and tells you what day it is. Example DAY(1/1/2005) = 1
- 6) EOMONTH function tells you what date is at the end of the month (including leap year)
  - -1 gives end of last month
  - 0 gives end of this month
  - 1 gives end of next month
- 7) EDATE returns a date that is a specified number of months before or after a supplied start date.
  - 1 jumps 1 month ahead
  - -1 jumps 1 month back
  - Example: EDATE(1/3/2016,1) = 2/3/2016
- 8) DATE function builds a date for you. Example: DATE(2004,2,2) = 2/2/2004

### Examples of EOMONTH, EDATE and DATE functions:

25	EOMONTH function tells you what date	is at the end of the mor	th (including leap year)											
26	Invoice Date (Date on Invoice)	2/2/2016												
27	End of the Month	2/29/2016	=EOMONTH(B26,0)											
28														
29	EDATE function jumps forward or backwards through the months given a start date (like 11/7/2011)													
30	Invoice Date (Date on Invoice)	11/7/2015	1/7/2015 -1 = last month. 1 = next month. 2 = two months ah											
31	Same Day Next Month	12/7/2015	=EDATE(B30,1)											
32														
33	Hire Date	11/7/2014												
34	Number Years until Pension Vests	5												
35	Vest Date	11/7/2019	=EDATE(B33,B34*12)											
36														
37	Dates I	Date DATE function builds a date for you. Example: DATE(2004,2,2) =												
38	20010714	7/14/2001	=DATE(LEFT(A38,4),MID(A38,5,2),RIGHT(A38,2))											
39	20040410	4/10/2004												
40	20091115	11/15/2009												
41	20000610	6/10/2000												
42	20080401	4/1/2008												
43	20100717	7/17/2010												

#### Fiscal Year

- 1) Fiscal Year for a company can be any three-month period.
- 2) Companies select Quarter 4 to be the slowest time of there year so that they have more time to do taxes and create financial reports.
- 3) Examples of Fiscal Quarters:

A -1 - 1 B A 1 b	A de al Versa	Fired Control Calcabana
Actual Month	Actual Year	Fiscal Quarterly Sales Report
January	2016	2015 - Q4
February	2016	2015 - Q4
March	2016	2015 - Q4
April	2016	2016 - Q1
May	2016	2016 - Q1
June	2016	2016 - Q1
July	2016	2016 - Q2
August	2016	2016 - Q2
September	2016	2016 - Q2
October	2016	2016 - Q3
November	2016	2016 - Q3
December	2016	2016 - Q3

## Example of Data Set with Date Helper Columns, including Formulas for Quarters and Fiscal Quarter and Fiscal Year:

-:4	Α	В	C	D	E	F	G	Н	I	J	K	L	M	N	O P	Q	R	S	T	U	1
											Fiscal	Fiscal	Fiscal								
61	Date	Sales Rep	Sales	YEAR	MONTH	DAY	Month Name	Day Name	Quarter	Q Label	Quarter	Quarter	Year	F Q Label							
62	1/25/2016	Michael G	\$389.00	2016	1	25	January	Monday	1	Q1 - 2016	4		4 2015	2015 - Q4	YEAR Formula	in D62: =Y	EAR(A62)				
63	2/9/2016	Dan	\$648.00	2016	2	9	February	Tuesday	1	Q1 - 2016	4		4 2015	2015 - Q4	MONTH Formu	ula in E62:	=MONTH(	A62)			
64	2/29/2016	Abdisamad A	\$295.00	2016	2	29	February	Monday	1	Q1 - 2016	4		4 2015	2015 - Q4	DAY Formula i	in F62: =DA	Y(A62)				
65	2/29/2016	Catherine W	\$577.00	2016	2	29	February	Monday	1	Q1 - 2016	4		4 2015	2015 - Q4	Month Name Formula in G62: =TEXT(A62,"mmmm")						
66	3/18/2016	Dana L	\$419.00	2016	3	18	March	Friday	1	Q1 - 2016	4		4 2015	2015 - Q4	Day Name Formula in H62: =TEXT(A62,"dddd")						
67	4/2/2016	Michael G	\$658.00	2016	4	2	April	Saturday	2	Q2 - 2016	1		1 2016	2016 - Q1	Quarter Formula in I62: =ROUNDUP(E62/3,0)						
68	4/8/2016	Cherry M	\$503.00	2016	4	8	April	Friday	2	Q2 - 2016	1		1 2016	2016 - Q1	Q Label Formula in J62: ="Q"&I62&" - "&D62						
69	4/9/2016	Nikol M	\$236.00	2016	4	9	April	Saturday	2	Q2 - 2016	1		1 2016	2016 - Q1	Fiscal Quarter Formula in K62: =VLOOKUP(E62,\$J\$56:\$K\$59,2)						
70	6/15/2016	Dan	\$537.00	2016	6	15	June	Wednesday	2	Q2 - 2016	1		1 2016	2016 - Q1	Fiscal Quarter Formula in L62: =IF(E62<4,4,ROUNDUP(E62/3,0)-1					1)	
71	8/3/2016	Sarabeth L	\$325.00	2016	8	3	August	Wednesday		Q3 - 2016	2		2 2016	2016 - Q2	Fiscal Year Formula in M62: =IF(E62<4,D62-1,D62)						
72	8/20/2016	Anastasiya A	\$510.00	2016	8	20	August	Saturday		Q3 - 2016	2		2 2016	2016 - Q2	F Q Label Forn	mula in N6	2: =M62&	" - Q"&L62	2		
73	9/9/2016	Catherine W	\$557.00	2016	9	9	September	Friday		Q3 - 2016	2		2 2016	2016 - Q2							
74	10/30/2016	Nikol M	\$674.00	2016	10	30	October	Sunday	4	4 Q4 - 2016	3		3 2016	2016 - Q3							
75	11/1/2016	Dina	\$470.00	2016	11	1	November	Tuesday	4	4 Q4 - 2016	3		3 2016	2016 - Q3							

# Cumulative List of Keyboards Throughout Class:

- 1) Esc Key:
  - i. Closes Backstage View (like Print Preview).
  - ii. Closes most dialog boxes.
  - iii. If you are in Edit mode in a Cell, Esc will revert back to what you had in the cell before you put the Cell in Edit mode.
- 2) F2 Key = Puts formula in Edit Mode and shows the rainbow colored Range Finder.
- 3) SUM Function: Alt + =
- 4) Ctrl + Shift + Arrow = Highlight column (Current Region).
- 5) Ctrl + Backspace = Jumps back to Active Cell
- 6) **Ctrl + Z** = Undo.
- 7) Ctrl + Y = Undo the Undo.
- 8) **Ctrl + C** = Copy.
- 9) **Ctrl + X** = Cut.
- 10) Ctrl + V = Paste.
- 11) Ctrl + PageDown = expose next sheet to right.
- 12) Ctrl + PageUp = expose next sheet to left.
- 13) Ctrl + 1 = Format Cells dialog box, or in a chart it opens Format Chart Element Task Pane.
- 14) **Ctrl + Arrow**: jumps to the bottom of the "**Current Region**", which means it jumps to the last cell that has data, right before the first empty cell.
- 15) Ctrl + Home = Go to Cell A1.
- 16) Ctrl + End = Go to last cell used.
- 17) Alt keyboards are keys that you hit in succession. Alt keyboards are keyboards you can teach yourself by hitting the Alt key and looking at the screen tips.
  - i. Create PivotTable dialog box: Alt, N, V
  - ii. Page Setup dialog box: Alt, P, S, P
  - iii. Keyboard to open Sort dialog box: Alt, D, S
- 18) ENTER = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell DOWN.
- 19) CTRL + ENTER = When you are in Edit Mode in a Cell, it will put thing in cell and keep cell selected.
- 20) TAB = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell RIGHT.
- 21) SHIFT + ENTER = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell UP.
- 22) SHIFT + TAB = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell LEFT.
- 23) Ctrl + T = Create Excel Table (with dynamic ranges) from a Proper Data Set.
  - i. Keyboard to name Excel Table: Alt, J, T, A
  - ii. **Tab** = Enter Raw Data into an Excel Table.
- 24) Ctrl + Shift + ~ (`) = General Number Formatting Keyboard.
- 25) Ctrl +; = Keyboard for hardcoding today's date.
- 26) **Ctrl + Shift + ;** = Keyboard for hardcoding current time.
- 27) Arrow Key = If you are making a formula, Arrow key will "hunt" for Cell Reference.
- 28) Ctrl + B = Bold the Font
- 29) Ctrl + \* (on Number Pad) or Ctrl + Shift + 8 = Highlight Current Table.
- 30) Alt + Enter = Add Manual Line Break (Word Wrap)
- 31) Ctrl + P = Print dialog Backstage View and Print Preview
- 32) **F4 Key** = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:

- i. **A1** = Relative
- ii. \$A\$1 = Absolute or "Locked"
- iii. **A\$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)
- iv. **\$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you across the columns)
- 33) Ctrl + Shift + 4 = Apply Currency Number Formatting
- 34) **Tab key** = When you are selecting a Function from the Function Drop-down list, you can select the function that is highlighted in blue by using the Tab key.
- 35) **F9 Key** = To evaluate just a single part of formula while you are in edit mode, highlight part of formula and hit the F9 key.
  - i. If you are creating an Array Constant in your formula: Hit F9.
  - ii. If you are evaluating the formula element just to see what that part of the formula looks like, REMEMBER: to Undo with Ctrl + Z.
- 36) Alt, E, A, A = Clear All (Content and Formatting)
- 37) Evaluate Formula One Step at a Time Keyboard: Alt, M, V
- 38) Keyboard to open Sort dialog box: Alt, D, S
- 39) Ctrl + Shift + L = Filter (or Alt, D, F, F) = Toggle key for Filter Drop-down Arrows
- 40) Ctrl + N = Open New File
- 41) **F12** = Save As (Change File Name, Location, File Type)
- 42) Import Excel Table into Power Query Editor: Alt, A, P, T
- 43) Ctrl + 1 (When Chart element in selected): Open Task Pane for Chart Element
- 44) **F4 Key** = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:
  - i. A1 = Relative
  - ii. **\$A\$1** = Absolute or "Locked"
  - iii. **A\$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)
  - iv. **\$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you across the columns)
- 45) Keyboard to open Scenario Manager = Alt, T, E
- 46) Ctrl + Tab = Toggle between Excel Workbook File Windows
- 47) Ctrl + Shift + F3 = Create Names From Selection
- 48) Ctrl + F3 = open Name Manager
- 49) **F3** = Paste Name or List of Names
- 50) Alt + F4 = Close Active Window
- 51) Window Key + Up Arrow = Maximize Active Window
- 52) **Ctrl + Shift + Enter** = Keystroke to enter Array Formulas that: 1) have a function argument that requires it, or 2) whether or not you are entering the Resultant Array into multiple cells simultaneously.
- 53) **Ctrl + /** = Highlight current Array

## **New In This Video:**

54) None