Office 2016 - Excel Basics 10

Video/Class Project #22

Excel Basics 10: Date & Time Number Formatting, Formulas, Functions & Calculations

Goal in video # 10: Learn about Date & Time Number Formatting and see how to create various Date and Time Formulas for business situations like Invoicing and Payroll.

1) Date Number Format:

- i. Enter dates with forward slashes (there are other methods also) such as: 3/30/2016.
- ii. Under the Date Number Format is a Serial Number that represents the number of days since December 31, 1899.
 - 1. Examples:

Jan 1, 1900 = 1 Jan 2, 1900 = 2 Oct 30, 2013 = 41577 Mar 30 = 42459

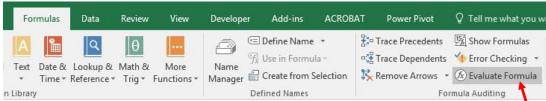
- iii. Some Date Math Formulas:
 - 1. **=End Date Start Date** = Number of Days Between Two Dates (Number of days an invoice is late).
 - 2. **=End Date Start Date + 1**= Number of Days Between Two Dates Including the Start Date (Number of days for a project that includes the start date).
 - 3. =Loan Issue Date + Number of Days Loan Outstanding = Maturity Date.
- iv. Some examples of Excel Date Functions:
 - 1. **EDATE** function allows you to take a date and get the same day in a future or past month.
 - i. =EDATE(Date,2) jumps two months ahead
 - ii. =EDATE(Date,-2) jumps two months backwards.
 - 2. **EOMONTH** allows you to take a date get the end of the month date for the current month, a future month, or a past month.
 - i. =EOMONTH(Date,0) gives you the end of the month
 - ii. =EOMONTH(Date,1) gives you the end of next month
 - iii. =EOMONTH(Date,-1) gives you the end of last month.
- v. Date Keyboards:
 - 1. **Ctrl + ;** = Keyboard for hardcoding today's date.

2) Time Number Format:

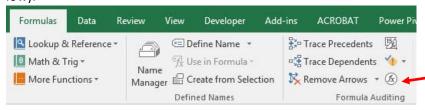
- i. Enter time as hour, colon, minutes, colon, seconds, then a space, and AM or PM (there are other methods also) such as: 8:00 AM.
- ii. Under the Time Number Format is a serial number that represents the proportion of one 24-hour day.
 - 1. Examples:

- iii. Some Time Math Formulas:
 - 1. =(End Time Start Time)*24 = Hours worked in a non-night-shift day.
 - 2. **=MOD(End Time Start Time,1)*24** = Hours worked in a day or night-shift day.
- iv. Time Keyboards:
 - 1. **Ctrl + Shift + ;** = Keyboard for hardcoding current time.

- i. Click in cell with formula.
- ii. In Formula Ribbon Tab, in the Formula Auditing Group, click the Evaluate Formula button.
 - 1. The button may look like this large button (Your screen is wide, or your screen resolution is high):



2. The button may look like this small button (Your screen is narrow, or your screen resolution is low):



iii. Then you will see the Evaluate Formula dialog box, like this:



iv. Click Evaluate button or use Enter to watch each step that Excel uses to evaluate or calculate your formula!

4) Keyboards seen in this video:

- 1. **Ctrl + ;** = Keyboard for hardcoding today's date.
- 2. **Ctrl + Shift + ;** = Keyboard for hardcoding current time.
- 3. **Ctrl + F1** = Toggle Ribbon Tabs from Hidden to not Hidden
- 4. Ctrl + Shift + ~ or Ctrl + Shift + ` = Apply General Number Formatting (Eraser)