EXCEL TIPS NOVEBER 2021

To find the Excel file for this document go to

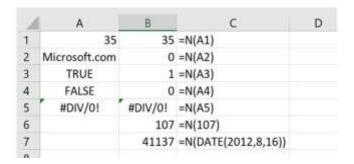
EXCEL TIPS PAGE UNDER NOVEMBER 2021

To subsribe, email me <u>isaacgottlieb@gmail.com</u>

| | PAGE |
|-------------------------------------|------|
| 1 The N Function and an Unusual Use | 2 |
| 2 Covert Hours to Minutes | 3 |
| 3 Geometric Mean | 4 |
| 4 Change the Interface Color Scheme | 5 |
| 5 Using Emoji Symbols in Excel | 6 |

1 THE N FUNCTION AND AN UNUSUAL USE

The N function returns number entered or a zero "0" otherwise.



An unconventional way to add a comment to your Excel formulas

Sometimes you wish to add a comment to your formula or function in a cell.

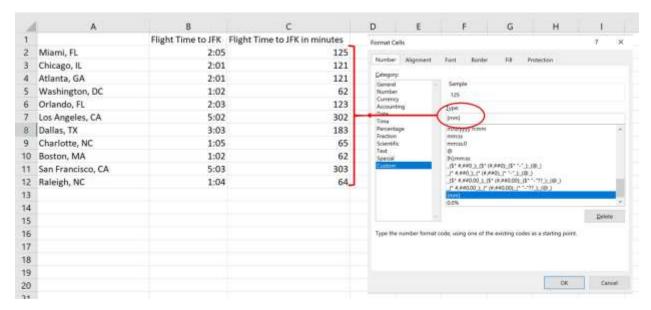
You can use the N function to enter notes directly in a formula. Simply enter +N("whatever note you want") at the end of the formula. The text of the note must appear in double quotes ("") and returns a value of 0 so it does not affect the calculation. THIS VALUE IS A ZERO "0".

Here is an example where N("I was told by John to sum these numbers") equals "0"

| 21 | 237 | =SUM(B23:B27)+ N("I was told by John to sum these numbers") | | | | |
|----------------------|----------|---|--|--|--|--|
| 22 | | | | | | |
| 23 | 34 | I. | | | | |
| 24 | 32 | Ì | | | | |
| 25 | 52 | | | | | |
| 26 | 44 | | | | | |
| _ | | | | | | |
| | | | | | | |
| 21 | 237 | =SUM(B23:B27)+0 | | | | |
| | 237 | =SUM(B23:B27)+0 | | | | |
| 22 | 237 | =SUM(B23:B27)+0 | | | | |
| 21 22 23 24 | | =SUM(B23:B27)+0 | | | | |
| 22 23 | 34 | =SUM(B23:B27)+0 | | | | |
| 22 23 24 | 34 32 | =SUM(B23:B27)+0 | | | | |

2 COVERT HOURS TO MINUTES

If you want time displayed as minutes – all you have to do is format cells as [mm] .



3 GEOMETRIC MEAN

Thee Geometric Mean is commonly used to calculate the annual return on **portfolio of securities** or **compounded annual growth rate** (see examples below.)

Calculation: Multiply the numbers together and then take the nth root of the numbers such that the nth root is equal to the number of numbers you multiplied.

Calculations:

$$GM = \sqrt[3]{X_1 * X_2 * X_3}$$

$$GM = \sqrt[6]{X_1 * X_2 * X_3} * X_4 * X_5 * X_6$$

Examples:

Portfolio: If you have a portfolio of stocks that goes up from \$100 to \$110 in year one, then declines to \$80 in year two and goes up to \$150 in year three. The return on portfolio is then calculated as $($150/$100)^{(1/3)} = 0.1447$ or 14.47%.

Annual Growth Rate: For a stock that grows by 10% in year one, declines by 20% in year two, and then grows by 30% in year three. The geometric mean of the growth rate is calculated as follows: $((1+0.1)*(1-0.2)*(1+0.3))^{(1/3)} = 0.046$ or 4.6% annually.

And in Excel

| Year | Growth | Growth Factor | | | annuany. | | | |
|--------|--------|---------------|---------|-----|----------|---------------------|-----------|--|
| Year 1 | 12% | 1.12 | | | | | | |
| Year 2 | 10% | 1.10 | Average | 8.0 | 00% | =AVERAGE | (113:117) | |
| Year 3 | 9% | 1.09 | GEOMEAN | 7.8 | 37% | =GEOMEAN(J13:J17)-1 | | |
| Year 4 | -2% | 0.98 | | | | | | |
| Year 5 | 11% | 1.11 | | | | | | |

If an of your returns is negative (for example "-2%") add a "1" to all entries so that they become positive (-2%+1 = 0.98). You subtract "1" from the result as you see in the figure above.

4 Change the Interface Color Scheme

To change the interface color scheme, you need:

1. Turn in to the «FILE» menu.

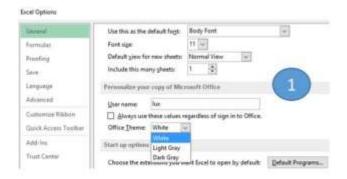
To select the «Options» option.

To select the «General» option.

«Personalize your copy of Microsoft Office»

In the «Office Theme» option, to indicate the desired color scheme from the drop-down list.

2. Or, Go to File Account Choose Office Theme.





White



Grey



5 Using Emoji Symbols in Excel

1. Open your emoji picker:

Windows 10 users, press the Windows key + . OR the Windows key + ; Mac users, press Control + Command + Space Bar

- 2. Click to open the Symbols options. Insert>Symbols and choose Windings
- 3. From the Fonts, select Wingdings. FYI, Wingdings2 also has some emoji-like symbols you may want to look at.
- 4. Since Windows 8, there is a virtual keyboard installed. With this, you can easily add an emoji's



You can use your emoji symbols in formulas, charts or sheet names.

Using the emoji in a formula: =IF(L6>0,"@","(2)")

