# Microsoft Excel 2019 Session 6: VLOOKUP & Formula Auditing

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# Formula Auditing

#### Show Formulas

1. Click: Formulas > Show Formulas

To turn off:

1. Click: Formulas > Show Formulas

#### Go To Formulas

1. Click: Go to Special
2. Click: Formulas

#### Trace Precedents/Dependents

1. Select a cell
2. Click: Formulas > Trace Precedents (Dependents)

#### Evaluate a Formula

1. Select a cell containing a complex formula
2. Click: Formulas > Evaluate Formula

# Misc. Exam Tasks:

#### Customize the Quick Access Toolbar

Add a program to the QAT:

1. Click: Customize Quick Access Toolbar
2. Choose the desired programs

#### Change Workbook Views

Normal v**s**. Page Layout vs. Page Break Preview

1. Click the View tab
2. Choose the desired view

#### Create a Custom View

You can save the way a worksheet looks (hidden rows and columns, filter settings, and print settings) in a Custom View.

1. Click: View > Custom Views
2. Click: Add
3. In the Name box, type a name

Note: Custom Views do not work with Excel Tables

#### Split a Worksheet

To see two different parts of a worksheet at the same time.

1. Select a cell in column A below the desired split
2. Click: View > Split
3. Scroll within each split pane

#### View 2 Workbooks Side by Side

View two worksheets from different workbooks

1. Open both workbooks
2. Click: View > New Window
3. Click: View > Side by Side
4. If necessary, click: View > Arrange All and choose Vertical
5. If desired, click: View > Synchronous Scrolling

#### View Multiple Windows in a Workbook

Open a new window in a workbook

1. Click: View > New Window
2. Repeat for each new window you want

# Workbook Management

#### Change Workbook Themes

1. Click: Page Layout > Themes
2. Choose the desired theme

#### Modify Document Properties

1. Click: File > Info > Show All Properties
2. Change the desired property

#### Save in Alternate File Formats

1. Click: File > Save as > Browse
2. Change Save as Type to desired file format
3. Enter filename and click Save

##### Popular Alternate File Format

* Older Excel version (.xls)
* PDF (difficult to change)
* CSV (text only)

#### Inspect a Workbook for Hidden Properties

1. Save the file
2. Click: File > Info > View for Issues > Inspect Document
3. Click: Inspect

#### Inspect a Workbook for Accessibility Issues

1. Click: File > Info > View for Issues > Check Accessibility

#### Protect a Workbook with a Password

1. Click: File > Info > Protect Workbook > Encrypt with Password

# Lookup Functions

**What VLOOKUP Does**

* Looks up one value in a table and returns a value related to it.
* E.g., Looks up a name in a phone book and returns the phone number
* Use VLOOKUP with a vertical lookup table
* Use HLOOKUP with a horizontal table (rare)
* Tip: Use the Insert Function button (fx)

**VLOOKUP Terms:**

Lookup\_value:

What you look up in the table

E.g., a name with no phone number

Table\_array

The lookup table

E.g., a phone book

Omit the labels

Should be sorted by first column

Should usually have “$”

I.e., Absolute References

Col\_index\_num:

The number of the column that has the result

Usually, 2, but sometimes 3 or 4

Range\_lookup:

Whether you will accept an approx. match

By default, true

But, should be false when looking up text values

Approximate matches can give false results

# Data Validation

**Ensuring Valid Data**

*This tool will prevent users from entering invalid data into a cell or formula.*

1. Select the cells that require valid data.
2. Click: Data > Data Validation
3. In the Allow list box, choose: Whole Number or Decimal, or other option.
4. Enter the allowable minimum and maximum values.
5. If desired, click the Input Message tab and enter a screen tip message to help the user.

**Pick Values from a Data Validation List**

*This trick makes it easy to ensure a consistent set of values in a column.*

1. Select the cells that require valid data.
2. Click: Data > Data Validation
3. In the Allow list box, choose: List
4. Click in the Source box
5. Navigate to the list of options and select them.

*Now when you click one of these cells, a list arrow will appear.*

**Removing #N/A Errors**

*To remove unsightly #N/A (data is Not Available) error messages, use the IFNA function.*

1. Format: IFNA(value, value if NA).
2. Example: ROUND(A4\*A5, 0) 🡪 returns 0 if either A4 or A5 contains inappropriate values.

# PowerPoint Integration

#### 2 Ways to Insert PowerPoint Charts into PowerPoint Slides

Excel charts can be created within PowerPoint itself, but usually charts are created in a separate Excel spreadsheet.

#### 1. Insert a Chart as a Picture

This is the simplest approach. The inserted chart cannot be edited within PowerPoint.

1. In Excel, copy the chart
2. In PowerPoint, choose Paste Options > Picture

#### 2. Insert a Chart as a PowerPoint Object

This lets you edit the chart data, if needed.

1. In Excel, copy the chart
2. In PowerPoint, choose Paste Options > … Embed Workbook

#### 3. Insert a Linked PowerPoint Chart

This approach links the PowerPoint chart with the Excel data. When the Excel data is changed, the chart will change also.

1. In Excel, copy the chart
2. In PowerPoint, choose Paste Options > … Link Data

# Mail Merge Tricks

#### 2 Ways to Fix Mail-Merge Number Formats

Sometimes a simple number like 1.1 will appear as 1.10000000001. There are three ways to fix this:

#### 1. Use the TEXT function in Excel

The TEXT function enables you to specify exactly how a number should appear.

1. Format: TEXT(*number*, *format code*).
2. Example: TEXT(.2345, "$0.00")

Result of this format code: “$0.23”

Note that numbers in a Text format cannot be used in aggregate functions, e.g., SUM and AVERAGE.

#### 2. In Word, Insert a Numeric Switches

A numeric switch will change the way a number appears in a Merge Field. In Word:

1. Click the **Mailings** tab at the top of the window
2. Be sure the **Preview Results** button is toggled off
3. Right-click a Mail-Merge field.
4. Choose the **Toggle Field Code** option
5. Type a numeric switch such as: **\# 0.00**
6. Right-click the Mail-Merge field again
7. Choose the **Update Field**
8. Click **Preview Results** to see the new number format.