MOS Excel 2013 Quick Reference

Exam 77-420: MOS Excel 2013 Objectives
https://www.microsoft.com/learning/en-us/exam-77-420.aspx
YouTube Videos: http://www.youtube.com/user/3mit1/playlists

Create and Manage Worksheets and Workbooks

Create worksheets and workbooks

- o Creating new blank workbooks
    - ▪ File --> New --> Blank Workbook
- o Creating new workbooks using templates
    - ▪ File --> New --> Select one, Search, or Suggested Search
- o Importing files
    - ▪ File --> Open --> Locate file --> Change type --> Open --> Wizard
- o Opening non-native files directly in Excel
    - ▪ File --> Open --> Locate file --> Change type --> Open
- o Adding worksheets to existing workbooks
    - ▪ New sheet button or Home tab --> Cell group --> Insert --> Insert Sheet
- o Copying and moving worksheets
    - ▪ Right click Sheet tab --> Move or Copy --> Select Sheet --> Create Copy
    - ▪ Drag sheet tables to move them

Navigate Through Worksheets and Workbooks

- o Searching for data within a workbook
    - ▪ Return to top of sheet --> Home tab --> Editing group --> Find & Select
- o Inserting hyperlinks
    - ▪ Select cell --> Insert tab --> Links group --> Hyperlink
- o Changing worksheet order
    - ▪ Drag sheet tabs to position them
    - ▪ Right click sheet tab --> Move or Copy --> Select sheet
- o Using Go To
    - ▪ Home tab --> Editing group --> Find & Select --> Go To or Go To Special
- o Using Name Box
    - ▪ Click Name Box --> Enter cell reference
    - ▪ Select range of cells --> Enter name in Name Box

Format Worksheets and Workbooks

- o Changing worksheet tab color
    - ▪ Select tab --> Home tab --> Cells group --> Format --> Tab color
    - ▪ Right click tab --> Tab Color
- o Modifying page setup

- - Page Layout tab --> Page Setup group (more options under Dialog Box Launcher button)
  - o Inserting and deleting columns and rows
    - Select column or row --> Home tab --> Cells group
    - Right click column or row
  - o Changing workbook themes
    - Page Layout tab --> Themes group
  - o Adjusting row height and column width
    - Select row or column --> Home tab --> Cells group --> Format Row Height or Column Width
  - o Inserting watermarks
    - Insert tab --> Text group --> Header and Footer --> Select location --> Insert object
  - o Inserting headers and footers
    - Insert tab --> Text group --> Header and Footer
    - Page Layout tab --> Page Setup group --> Dialog Box Launcher button --> Header/Footer tab
  - o Setting data validation
    - Select cells --> Data tab --> Data Tools group --> Data Validation --> Data Validation

Customize Options and Views for Worksheets and Workbooks

- o Hiding worksheets
  - Select sheet --> Home tab --> Cells group --> Format --> Hide and Unhide
  - Right click sheet tab --> Hide
- o Hiding columns and rows
  - Select column or row --> Home tab --> Cells group --> Format --> Hide and Unhide
  - Right click column or row --> Hide
- o Customizing the Quick Access toolbar
  - Drop down arrow on Quick Access toolbar --> More Commands
  - Choose commands from --> All Commands
- o Customizing the Ribbon
  - File tab --> Options --> Customize Ribbon
  - Turn on Developer tab
  - Add new tab and new group
- o Managing macro security
  - Developer tab --> Code group --> Macro Security
  - Review all Trust Center settings
- o Changing workbook views
  - Buttons in right portion of Status Bar
  - View tab --> Views group
- o Recording simple macros
  - Carefully plan the steps --> PRACTICE!
  - Developer tab --> Code group --> Record Macro --> Enter name --> OK --> Record steps --> Click Stop in Status Bar
  - Access macro from Developer tab
- o Adding values to workbook properties
  - File tab --> Properties --> Show All Properties
  - File tab --> Properties --> Advanced Properties
- o Using zoom
  - Right portion of Status Bar
  - View tab --> Zoom group

- o Displaying formulas
  - ▪ Formulas tab --> Formula Auditing group --> Show Formulas
- o Freezing panes
  - ▪ Select cell --> View tab --> Window group --> Freeze Panes
- o Assigning shortcut keys
  - ▪ File tab --> Options --> Customize Ribbon --> Customize button --> Macros --> Macro category --> Select macro --> Press keys --> Assign
- o Splitting the window
  - ▪ View tab --> Window group --> Split

Configure Worksheets and Workbooks to Print or Save

- o Setting a print area
  - ▪ Select cells --> Page Layout tab --> Page Setup group --> Print Area -->
  - ▪ Set Print Area
- o Saving workbooks in alternate file formats
  - ▪ File tab --> Export --> Create PDF/XPS Document --> Create
  - ▪ File tab --> Export --> Change File Type --> Choose file type --> Save As
- o Printing individual worksheets
  - ▪ Use Ctrl + Click to select sheets --> File tab --> Print --> Print Active Sheets
- o Setting print scaling
  - ▪ File tab --> Print --> Bottom option under Settings --> Scale to paper size --> Select option
- o Repeating headers and footers
  - ▪ Page Layout tab --> Page Setup group --> Dialog Box Launcher button --> Header/Footer tab --> Different Odd and Even Pages
  - ▪ Page Layout tab --> Page Setup group --> Dialog Box Launcher button --> Sheet tab
- o Maintaining backward compatibility
  - ▪ File tab --> Export --> Change File Type --> Excel 97-2003 Workbook --> Save As
- o Configuring workbooks to print
  - ▪ File tab --> Print --> Review all Settings
- o Saving files to remote locations
  - ▪ File tab --> Save As --> SkyDrive --> Sign in if necessary --> Browse --> Select folder --> Enter file name --> Save

Create Cells and Ranges

Insert Data in Cells and Ranges

- o Appending data to worksheets
  - ▪ Select destination cell --> Data tab --> Get External Data --> Select Source
- o Finding and replacing data
  - ▪ Home tab --> Editing group --> Find & Select --> Replace
  - ▪ Do Find Next / Replace or Replace All
- o Copying and pasting data
  - ▪ Home tab --> Clipboard group --> Paste button
  - ▪ Paste options
  - ▪ Clipboard task pane

- o Using AutoFill tool
  - Select cell --> Drag AutoFill handle
- o Expanding data across columns
  - Data tab --> Data Tools group --> Text to Columns
- o Inserting and deleting cells
  - Home tab --> Cells group --> Insert or Delete

Format Cells and Ranges

- o Merging cells
  - Select cells --> Home tab --> Alignment group --> Merge and Center button
  - Home tab --> Alignment group --> Dialog Box Launcher button
- o Modifying cell alignment and indentation
  - Select cells --> Home tab --> Various buttons in Alignment group
  - Home tab --> Alignment group --> Dialog Box Launcher button
- o Changing font and font styles
  - Select cells --> Home tab --> Font group buttons
  - Home tab --> Font group --> Dialog Box Launcher button
- o Using Format Painter
  - Select desired formatting --> Home tab --> Clipboard group --> Click or double click Format Painter
- o Wrapping text within cells
  - Select cells --> Home tab --> Alignment group --> Wrap Text button
- o Applying Number format
  - Select cells --> Home tab --> Number group
  - Home tab --> Number group --> Dialog Box Launcher button
- o Applying highlighting
  - Select cells --> Home tab --> Styles group --> Conditional Formatting --> Highlight Cells Rules
- o Applying cell styles
  - Select cells --> Home tab --> Styles group --> Cell Styles
- o Changing text to WordArt
  - Cut text in Formula bar --> Insert tab --> Text group --> WordArt

Order and Group Cells and Ranges

- o Applying conditional formatting
  - File tab --> Styles group --> Conditional Formatting
  - Set values for Icon Sets
- o Inserting sparklines
  - Select row of data --> Insert tab --> Sparklines group --> Select one
- o Transposing columns and rows
  - Select cells --> Select destination --> Home tab --> Clipboard group --> Bottom part of Paste button --> Transpose button
- o Creating named ranges
  - Select range --> Enter name in Name Box
  - Formulas tab --> Defined Names group --> Define Name or Create from Selection
- o Creating outline
  - Enter data --> Sort it and insert separator lines --> Data tab --> Outline group
- o Collapsing groups of data in outlines

- Use collapse buttons in left margin
  - o Inserting subtotals
    - Select cells --> Data tab --> Outline group --> Subtotal

Create Tables

Create a Table

- o Moving between tables and ranges
  - Select cells --> Home tab --> Styles group --> Format as Table
  - Select cell in table --> Table Tools: Design tab --> Tools group --> Convert to Range
- o Adding and removing cells within tables
  - Select cells --> Home tab --> Cells group --> Insert or Delete
- o Defining titles
  - Table Tools: Design tab --> Table Style Options --> Header Row
  - Table Tools: Design tab --> Properties --> Table Name

Modify a Table

- o Applying styles to tables
  - Table Tools: Design tab --> Table Styles group --> QuickStyles --> Select one
- o Banding rows and columns
  - Table Tools: Design tab --> Table Style Options group --> Check option
- o Inserting total rows
  - Table Tools: Design tab --> Table Style Options group --> Check Total Row
- o Removing styles from tables
  - Table Tools: Design tab --> Table Styles group --> QuickStyles --> None

Filter and Sort a Table

- o Filtering records
  - Click column heading --> Data tab --> Sort & Filter group --> Filter
  - Click drop down arrow on appropriate column to set options / clear filter
- o Sorting data on multiple columns
  - Data tab --> Sort & Filter group --> Large Sort button --> Add Levels --> Set other options
- o Changing sort order
  - Data tab --> Sort & Filter group --> Large Sort button --> Set Order
- o Removing duplicates
  - Select table --> Data tab --> Data Tools group --> Remove Duplicates

Apply Formulas and Functions

Utilize Cell Ranges and References in Formulas and Functions

- o Utilizing references (relative, mixed, absolute)
  - Relative reference: A1   Column and row ref bot will change when copied.

- Mixed reference: A$1   In this example, only the col ref will change when copied.
- Absolute reference: A1   In this example, neither will change when copied.
  - Defining order of operations
    - Please excuse my dear Aunt Sally
    - ( )   Exponents   Multiplication   Division   Addition   Subtraction
    - More information: http://support.microsoft.com/kb/25189
    - When in doubt, include ( ) to force certain parts of the equation to be evaluated first
  - Referencing cell ranges in formulas
    - Calculating sales tax: =B8*D1
    - FORMULA: =VLOOKUP(D11,GRADE_SCALE,2)

Summarize Data with Functions

- Utilizing the SUM function
  - =SUM(B13:B16)
- Utilizing the MIN and MAX functions
  - =MIN(B13:B16)
  - =MAX(B13:B16)
- Utilizing the COUNT function
  - =COUNT(B13:B16)
- Utilizing the AVERAGE function
  - =AVERAGE(B13:B16)

Utilize Conditional Logic in Functions

- Utilizing the SUMIF function
  - =SUMIF(A15:A23,"Red Team",B15:B23)
- Utilizing the AVERAGEIF function
  - =AVERAGEIF(D15:D23,"Red Team",E15:E23)
- Utilizing the COUNTIF function
  - =COUNTIF(G15:H23,"Yes")   will count the number of cells with Yes in them
  - =COUNTBLANK(H15:H23)   will count blank cells

Format and Modify Text with Functions

- Utilizing the RIGHT, LEFT and MID functions
  - =LEFT(A16,3)
  - =MID(A16,5,2)
  - =RIGHT(A16,4)
- Utilizing the TRIM function
  - =TRIM(F15)
- Utilizing the UPPER and LOWER functions
  - =UPPER(A15)
  - =LOWER(A15)
- Utilizing the CONCATENATE function
  - =CONCATENATE(E15&" "&G15&" "&F15)

Create Charts and Objects

Create a Chart

- o Creating charts and graphs
  - ▪ Select cells for chart --> Insert tab --> Charts group --> Recommended Charts or Choose a specific type
- o Adding additional data series
  - ▪ Add data --> Select chart --> Chart Tools: Design tab --> Data group --> Select Data --> Move dialog box --> Select new range of cells
- o Switching between rows and columns in source data
  - ▪ Select chart --> Chart Tools: Design tab --> Data group --> Switch Row/Column
- o Using Quick Analysis
  - ▪ Select cells --> Click Quick Analysis button --> Make selection

Format a Chart

- o Adding legends
  - ▪ Select chart --> Chart Tools: Design tab --> Add a Chart Element --> Legend
- o Resizing charts and graphs
  - ▪ Select chart --> Chart Tools: Format tab --> Size group (Or use sizing handles)
- o Modifying chart and graph parameters
  - ▪ Select chart --> Chart Tools: Format tab
  - ▪ Use Current Selection group to select portions of chart easily
  - ▪ Format Selection opens a task pane
  - ▪ Enter chart title
- o Applying chart layouts and styles
  - ▪ Select chart --> Chart Tools: Design --> Chart Layouts group --> Quick Layout
  - ▪ Select chart --> Chart Tools: Design --> Chart Styles group --> More button
- o Positioning charts and graphs
  - ▪ Drag the chart to position it in the current worksheet
  - ▪ Select chart --> Chart Tools: Design --> Location --> Move Chart

Insert and Format an Object

- o Inserting text boxes
  - ▪ Insert tab --> Text group --> Text Box --> Click or Click and drag
- o Inserting SmartArt
  - ▪ Insert tab --> Illustrations group --> SmartArt --> Select category --> Select graphic
- o Inserting images
  - ▪ Insert tab --> Illustrations group --> Pictures or Online Pictures
- o Adding borders to objects
  - ▪ Select object (e.g., picture) --> Picture Tools: Format tab --> Picture Styles group --> Picture Border --> Set color and width
- o Adding styles and effects to objects
  - ▪ Select SmartArt --> SmartArt Tools: Design --> SmartArt Styles group
  - ▪ Select picture --> Picture Tools: Format --> Picture Styles group / Adjust group
- o Changing object colors
  - ▪ Select SmartArt --> SmartArt Tools: Design --> SmartArt Styles group

- Select picture --> Picture Tools: Format --> Adjust group
  - Modifying object properties
    - Right click object --> Format Object (or Picture) --> Set options in task pane
    - Click object --> Use contextual tabs
  - Positioning objects
    - Drag and drop object
    - Contextual tab: Format --> Size group --> Dialog box launcher button