

Tools

- Wrap text: Displays text to column width and row height. Will display on multiple lines depending on row height. Select Cell → Ribbon → Home → Wrap text
- Merge and Center: Allows you to merge multiple columns (rows) into one single cell and display text of the leftmost (topmost) cell centered in the newly created merged cell. Select all cells with text in leftmost (topmost) → Ribbon → Home → Merge and Center
- Center Across Selection: Performs a similar task to Merge and Center except does not merge the cells. This function will take the text of the leftmost column and center it across the columns selected. It will still allow text to be entered into a selected column whereas a merged cell will replace the existing text. Select all cells with text in leftmost cell → Ribbon → Home → Alignment → box in bottom right corner → Drop down menu under Alignment - Horizontal → Center Across Selection
- Formatting currency: Accounting places dollar side on left side of cell. Currency places dollar sign beside the dollar figure. Currency is preferred format. Ribbon → Number → Drop-down Menu → Currency
- Can also change the currency to Euro, Yen, etc.
- IF: Evaluates a conditional statement and returns the desired value for true or false statement evaluations. Very powerful and important tool in Excel. Important to understand.
- “=IF(logical_test,[value_if_true],[value_if_false])”, where logical_test is the conditional statement you want to evaluate (ex is A1 greater than A2, value_if_true is what you want displayed/performed if the logical test is true, value_if_false is what to display if the logical test is false.
- Using IF example: Evaluate a grade in cell B30 and return Pass if greater than or equal to 75 and Fail if less than 75. “=IF(B30>=75,“Pass”,“Fail”)”
- Remember when the values returned in an IF statement are text they require quotes.
- VLOOKUP: Looks up a designated value in the leftmost column of a selected table and returns the value found in the designated column of that row where the lookup value matches the data in the leftmost column of the table.
- “=VLOOKUP(lookup_value,table_array,col_ind_num)”, where lookup_value is the what you want to lookup, table_array is the table you want to lookup the lookup_value in, and col_ind_number is the column of the table where the data you want returned is located.
- Special notes: For VLOOKUP to work correctly the data you want to lookup must be in the leftmost column of the table array selected and that data must be sorted in ascending order.
- Remember proper use of references (including mixed and absolute)!
- Grouping rows: allows you to easily collapse and expand a group of rows. Select all rows you want to collapse → Ribbon → Data → Outline → Group (ungroup)
- Hiding zeroes: Displays cells with a value of zero as blank. Only does this hiding for cells that are actually zero, not formatted displayed value. Select cell(s) → File → Options → Advanced → Display Options for this worksheet (halfway down) → Show a zero in cells that have a zero value.

- Name Manager: Allows user to view all named cells on the spreadsheet. Ribbon → Formulas → Name Manager
- Note: if you edit a name the cell will have two names now. Use Name Manager to fix errors in names or review named cells.
- Spinners: Changes the value of a cell using up and down arrows. Developer → Insert → Form Controls → Spinner (up and down arrow in second row) → Create by dragging into a box on spreadsheet → Right click → Format Control → Change min, max, incremental change, and cell link.
- Note: size of spinner may cause issues with functionality, increase to fix.
- Box and Whisker graph: Displays mean (x), median (line in box), 1st and 3rd quartile (bottom and top of box) in the box and the whiskers (line below and above box) are the min and max (can remove dots which display outliers). This graph displays more information about the distribution of data and therefore uncertainty if looking at stock prices. Select Data → Insert → Select Box and Whisker

Retirement Table

- Creating inputs section using tools such as spinners, naming cells, and formatting (merge and center, background fill, borders, wrap text, etc.)
- Make Career Savings table:
 - Inflation: First row: enter 1
 - Inflation: Second row =Reference to one*(1+InflationRate)
 - Inflation Adjusted Initial Salary: Reference to Inflation row*StartingSalary
 - Annual Salary: First row: StartingSalary
 - Annual Salary: Second Row: =IF(Current Age reference<=Retire Age,Previous year salary reference*(1+SalaryGrowthRate,0)
 - Annual Savings =IF(Current age reference >= Start Saving at Age, Current Annual Salary*SavingsRate,0)
 - Annual Withdrawal: First Row: Enter 0
 - Annual Withdrawal: Second Row: =IF(Previous Age Reference=RetireAge, Previous Annual Salary reference*SpendingInRetire,Previous Annual Withdrawal Reference*(1+InflationRate))
 - Total Savings: First row: Current Annual Savings reference-Current Annual Withdrawals.
 - Total Savings: Second row: =Previous Total Savings Reference*(1+IF(Current Age reference <= RetireAge, RateOfReturn, RetiredReturn))+Current Annual Savings reference-Current Annual Withdrawals reference
- How much money will I have when I retire?: =VLOOKUP(RetireAge,Career Savings Table,5)
- When will I run out of money?: =MAX(G20:G98) Enter the following into second row of Column G =IF(Previous Total Savings reference*Current Total Savings reference<0,Previous Age reference+Previous Total Savings reference*(1+RetiredReturn)/Current Annual Withdrawal reference,0)
- Other formatting used: freezing panes, hiding columns, currency formatting, number formatting.

What to Know for Exam

- Word Wrap
- Merge and Center vs Center Across Selection
- Currency vs Accounting formatting
- IF
- VLOOKUP
- Grouping row
- Hide zeroes
- Name Manager
- Spinners
- Box and Whiskers graph
- Must be able to do all tasks from retirement table (basic formatting, inputs, name cells, freeze panes, hide zeroes, currency format, all IF formulas for Salary, Savings, Withdrawals, Total Savings, Inflation, and Inflation Adjusted Salary, calculating outputs)
- Must know all formulas used in retirement table!