Chapter 7: Formula Shortcuts

Section 1: Create formulas rapidly

- Alt+'=' = Autosum hotkey
  - Then press the column (ex 'J' or 'A') that will sum all cells in the selected column
- sumif() = Sums all rows X column if the row also has Y value equal to something
  - EX: `=SUMIF(E:E,M13,J:J)`
  - FORM: `=SUMIF(range,criteria,[sum_range])`
    - for range if == critera place in sum
- averageif() = Average all rows X column if the row also has Y value equal to something
  - EX: `=AVERAGEIF(E:E,M13,J:J)`
  - FORM: `=AVERAGEIF(range,criteria,[average_range])`
    - for range if == critera place in sum. Finally average that over all rows that == critera
- Sum can also do multiple rows
  - `=SUM(3:3,13:13)` gets both row 3 and row 13

Section 2: Select all dependent or precendent cells

- Ctrl+Shift+']' = Select all cells dependent on the currently selected cell
- Trace Dependents = Draw arrows to show the flow of cell that is being used in other cells
  - Formulas Tab, Formula Auditing group
  - Clicking multiple times will show each level down the tree it goes
  - It will also show different sheets (Dashed line to icon of sheet)
- Ctrl+Shift+'[' = Select all cells precendent on the currently selected cell
- Trace Precendent = Draw arrows to show the flow of cell that is being used in selected cell
  - Formulas Tab, Formula Auditing group
  - Clicking multiple times will show each level up the tree it goes

Section 3: Use AutoSum shortcuts

- Alt+'=' = Autosum hotkey
- Use commas to spearate different ranges/sections
  - Need not be contiguous
- Excel will favor going up and left if the AutoSum is used without highlighting a specific area
- Highlighing a 2+ by 2+ area will do multiple sums at once
  - This favors going down
  - Highlight the area right and down to do both at the same time
  - Also works with average
    - Selectable from the Autosum dropdown

Section 4: Count the number of unique entries

- Highlight Duplicates can be flipped into Unique
- Filter can look at only unique records
- Array Formula = press Ctrl+Shift+Enter

- `{=SUM(1/COUNTIF(C3:C743,C3:C743))}`

Section 5: Use conditional formatting to highlight formula cells

- Find and select only highlights stuff in the moment, not actively adding or removing when a requirement is met or not met
- Create a highlight rule using formula
    - Home tab / Conditional Formatting / New Rule / Use Formula to ...
    - `=ISFORMULA(A1)`
    - Using A1 is done in the background, but applies to the whole sheet

Section 6: Preform calculations without formulas

- Paste special can add cell to a group of cells
    1. Select Cell to Add
    2. Select Area to add X to all of group Y
    3. Ctrl+Alt+'V' = Paste Special
    4. Choose 'Add' in the operations
- Can also be used with multiply
    - Ex. Use `1.1` as the cell and choose multiply