

4.01 Understand Spreadsheets Used in Business

III. **Spreadsheet Operations and Functions** increase the efficiency of data entry, the performing of calculations, and the presentation of information

A. **Spreadsheet operations**

1. **Sort** is used to arrange data in alphabetical or chronological order
 - a. A **primary sort** indicates the primary sort range of data, such as sort by last name
 - b. A **secondary sort** indicates the next range, such as first name
2. **Freeze panes** allows the user to work in multiple areas of a large spreadsheet and focus the view on specific cell ranges
3. **Fill Series** is used to fill a column or row with consecutive data, such as the days of the week, months, and checkbook numbers
4. **Print** is used to provide a hard copy
 - a. **Print preview** – used to view how data is represented on paper before printing and to make adjustments to margins, gridlines, and page orientation, etc.
 - b. **Print a selection** – used when printing only a portion of a spreadsheet
5. **Linking and embedding** is used to integrate spreadsheet data with other software applications
 - a. A word processing document (**target**) may contain a **link** to a spreadsheet (**source**) that will update anytime the spreadsheet data is edited
 - b. An **embedded** spreadsheet is converted into a graphic image when placed in a **target** document and does not change to reflect edits made at the **source**

B. **Advanced Functions** are used in higher-level operations, such as in conditional and comparison equations to compute interest rates, due dates and payment terms, and financial projections.

1. **IF statements** are conditional operators
 - a. Results are returned IF the data specified in an equation meets conditions set by the formula
 - b. IF statements can be written to carry out an action, such as: *IF a value in a cell is greater than or equal to another value, insert the word "Pass" in a cell*
2. **Date functions** used to calculate a period of time.
 - a. **NOW** - returns the current date
 - b. **Days360** - calculates difference in days between two dates



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- c. **LookUp function** used to compare a cell value to an array of cells and return a value that matches the location of the value in the array.
 - i. **Lookup** - used for **two column** vectors
 - ii. **VLookUp** - used when there are **more than two columns** in the array (lookup table).
- d. **List** used to assist in organizing spreadsheet information
 - i. Uses:
 - (a) Control the size or content of data entries
 - (b) Filter for specific content within a list such as displaying only the Southeast region vice presidents
 - ii. Types of Lists
 - (a) A **validated** limits data entry to specific choices programmed into the function
 - (b) A **non-validated** allows additional entries other than those provided in the drop-down menu
- e. **Count** is used to return the number of cells in a range
 - i. **Count** - number of cells in a range that contain numbers
 - ii. **CountA** - number cells in a range that contain value or letter
 - iii. **CountIf** - cells that meet a condition set forth in the formula