## Microsoft 365 Excel: Online

## The Excel Online Interface



1. Title bar
2. Search bar
3. Sharing commands
4. Tabs
5. Ribbon interface
6. Formula bar
7. Working area
8. Worksheet commands
9. Status bar

## Elements of an Excel Formula

- Formulas are always preceded by an equals sign (=).
- Formulas can contain cell references (such as "A1"), numbers (such as " 23 "), or functions [such as "SUM(B2:B9)"].
- =A1+23, =d2-c2, and =B10+b11/C6 are all valid formulas; cell references are not casesensitive.
- You can enter a formula by typing directly into a cell or into the formula bar:

- If you include a cell reference in a formula (like "=B3* $6^{\prime \prime}$ ), and that cell reference itself contains a second formula (like " $=\mathrm{B} 1+\mathrm{B} 2$ ", stored in B3), that second formula ("=B1+B2"), will be evaluated first, and the result will be used in $=\mathrm{B} 3 * 6$.


## What is Conditional Formatting

Conditional formatting will automatically highlight cells with data that satisfies certain criteria. It is useful for worksheets that show financial figures (where black formatting might equal positive values, while red formatting might equal negative values), test results (where results change color based on their value), or any time you want to highlight data within a certain range. To apply conditional formatting, select the target data, click Home $\rightarrow$ Conditional Formatting, choose the formatting category, and choose a style.

Here is an overview of the formatting categories.

- Highlight Cells Rules: Highlights cells that are greater than, less than, between, or equal to specified values.
- Top/Bottom Rules: Highlights the top or bottom numbers or percentages in the selected cells.
- Data Bars: Displays colored bars that are indicative of the value in the cell
- Color Scales: Uses different shades of color to represent different values, from low to high.
- Icon Sets: Applies graphics to usually indicate a cell's value.


## Mathematical Operators

Excel uses eight basic mathematical operators:

| Name | Symbol | Example |
| :--- | :---: | :--- |
| Exponent | $\wedge$ | $10^{\wedge} 2=100$ |
| Division | $/$ | $10 / 2=5$ |
| Multiplication | $*$ | $10^{*} 2=20$ |
| Addition | + | $10+2=12$ |
| Subtraction | - | $10-2=8$ |
| Equivalence | $=$ | $10=10$ |
| Greater Than | $>$ | $10>2$ |
| Less Than | $<$ | $2<10$ |

## Chart Elements

Each chart type has different elements that can be customized, but most charts have the following key elements:


These items are:

1. Vertical $(\mathrm{Y})$ axis
2. Horizontal $(X)$ axis
3. Gridlines
4. Data Series
5. Legend

## The Order of Operations

The common mathematical operators shown above are listed from top to bottom in order of precedence. This means that Excel does not simply calculate expressions from left to right; certain operations are performed before others. Multiplication and division, addition and subtraction, and the greater than/less than operations each have equal precedence.

One easy way to remember precedence order is to remember the word "BEDMAS," which stands for Brackets (Parentheses), Exponents, Division, Multiplication, Addition, and Subtraction. Note that:

- Division and multiplication have equal precedence, calculated from left to right.
- Addition and subtraction have equal precedence, calculated from left to right.


## Chart Types

When creating a chart, it is important to choose the right type for your data. Below is a list of each chart type that is available in Excel Online and the type of data that each is best suited to display:

- Column
- Line
- Pie
- Bar
- Area
- X Y (Scatter)
- Waterfall
- Funnel
- Hierarchical
- Statistical
- Radar

To insert a chart, select the data you want to chart. Then, click the Insert tab, choose the chart type, and choose the sub-type.

