

# Microsoft Excel 2019

Step

by

Step

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PRACTICE FILES



# Microsoft Excel 2019 Step by Step

By Curtis Frye

You can also create a custom numeric format to add a word or phrase to a number in a cell. For example, you can add the phrase *per month* to a cell with a formula that calculates average monthly sales for a year, to ensure that you and your colleagues will recognize the figure as a monthly average. If one of the built-in formats is close to the custom format you'd like to create, you can base your custom format on the one already included in Excel.



**IMPORTANT** You must enclose any text to be displayed as part of the format in quotation marks so that Excel recognizes the text as a string to be displayed in the cell.

### To apply a special number format

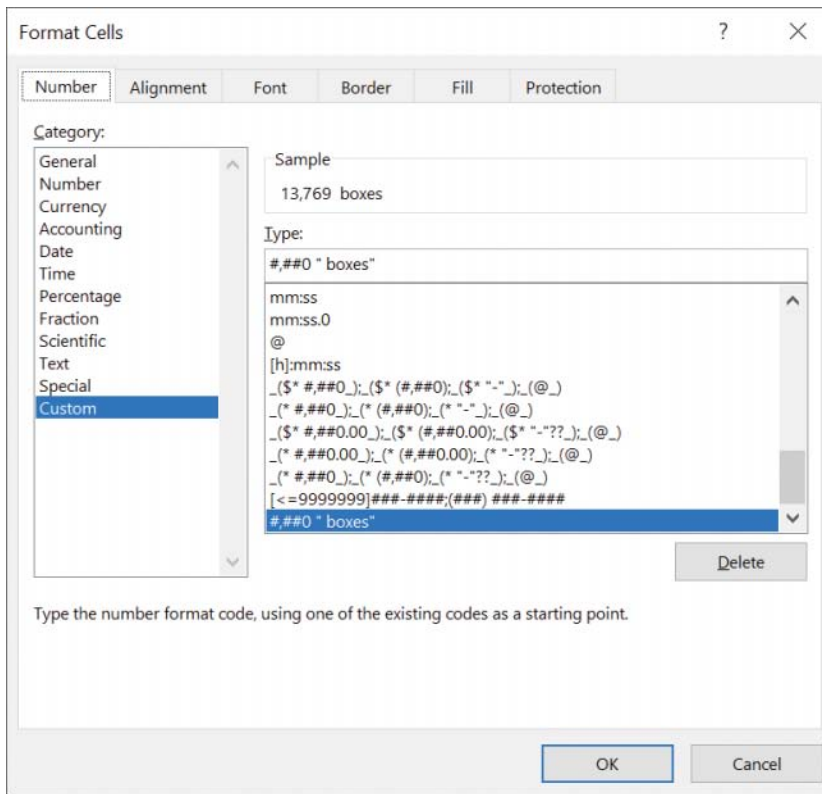
1. Select the cells to which you want to apply the format.
2. On the **Home** tab, in the **Number** group, click the **Number Format** arrow, and then click **More Number Formats**.
3. In the **Format Cells** dialog box, in the **Category** list, click **Special**.
4. In the **Type** list, click the format you want to apply.
5. Click **OK**.

### To create a custom number format

1. On the **Number Format** menu, click **More Number Formats**.
2. In the **Format Cells** dialog box, in the **Category** list, click **Custom**.
3. Click the format you want to use as the base for your new format.
4. Edit the format in the **Type** box.
5. Click **OK**.

### To add text to a number format

1. On the **Number Format** menu, click **More Number Formats**.
2. In the **Format Cells** dialog box, in the **Category** list, click **Custom**.
3. Click the format you want to use as the base for your new format.
4. In the **Type** box, after the format, enter the text you want to add, in quotation marks—for example, "**boxes**".



*Define custom number formats that display text after values.*

5. Click **OK**.

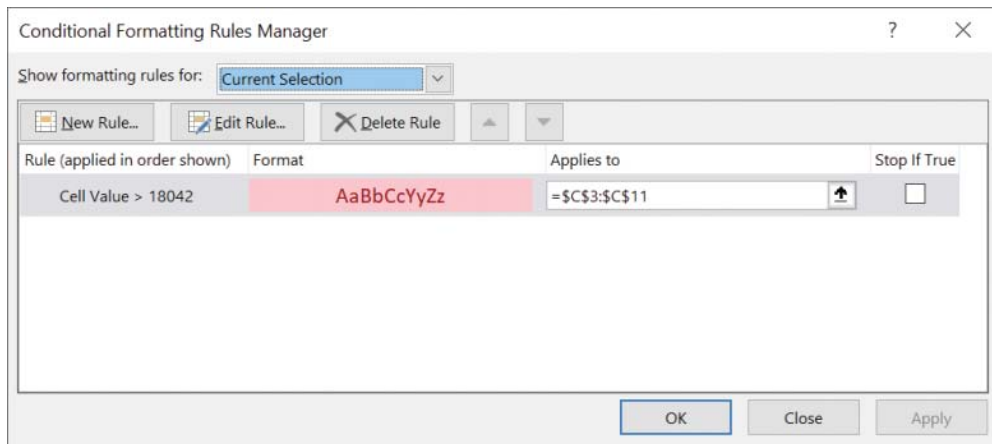
## Change the appearance of data based on its value

Recording information such as package volumes, vehicle miles, and other business data in a worksheet enables you to make important decisions about your operations. And as you saw earlier in this chapter, you can change the appearance of data labels and the worksheet itself to make interpreting your data easier.

Another way you can make your data easier to interpret is to have Excel change the appearance of your data based on its value. The formats that make this possible are called conditional formats, because the data must meet certain conditions, defined in conditional formatting rules, to have a format applied to it. In Excel, you can define

conditional formats that change how the app displays data in cells that contain values above or below the average values of the related cells, that contain values near the top or bottom of the value range, or that contain values duplicated elsewhere in the selected range.

When you select which kind of condition to create, Excel displays the Conditional Formatting Rules Manager, which contains fields and controls you can use to define your rule. If your cells already have conditional formats applied to them, you can display those formats, determine the order in which they are applied, and indicate how Excel should react if more than one rule is true.



*Manage conditional formats by using the Conditional Formatting Rules Manager.*

**You can control your conditional formats in the following ways:**

- Create a new rule.
- Change a rule.
- Remove a rule.
- Move a rule up or down in the order.
- Control whether Excel continues evaluating conditional formats after it finds a rule to apply.
- Save any rule changes and stop editing rules.
- Save any rule changes and continue editing.
- Discard any unsaved changes.

Clicking the New Rule button in the Conditional Formatting Rules Manager opens the New Formatting Rule dialog box. The commands in the New Formatting Rule dialog box duplicate the options displayed when you click the Conditional Formatting button in the Styles group on the Home tab. You can use those controls to define your new rule and the format to be displayed if the rule is true.

New Formatting Rule

Select a Rule Type:

- Format all cells based on their values
- Format only cells that contain
- Format only top or bottom ranked values
- Format only values that are above or below average
- Format only unique or duplicate values
- Use a formula to determine which cells to format

Edit the Rule Description:

**Format all cells based on their values:**

Format Style: 2-Color Scale

Minimum

Type: Lowest Value

Value: (Lowest value)

Color: [Orange]

Maximum

Type: Highest Value

Value: (Highest value)

Color: [Yellow]

Preview: [Orange to Yellow Gradient Bar]

OK Cancel

Edit conditional formats by using the Edit Formatting Rule dialog box.



**IMPORTANT** Excel doesn't check to make sure that your conditions are logically consistent, so you need to be sure that you plan and enter your conditions correctly.

You can also create three other types of conditional formats in Excel: data bars, color scales, and icon sets.


Data bars summarize the relative magnitude of values in a cell range by extending a band of color across the cell.

Call Volume	
Northeast	13,769
Atlantic	19,511
Southeast	11,111
North Central	24,972
Midwest	11,809
Southwest	20,339
Mountain West	20,127
Northwest	12,137
Central	20,047

*Apply data bars to view how values compare to one another.*

When data bars were introduced in Excel 2007, they filled cells with a color band that decreased in intensity as it moved across the cell. This pattern, called a gradient fill, made it a bit difficult to determine the relative length of two data bars because the end points weren't as distinct as they would have been if the bars were a solid color. In Excel 2019 you can choose between a solid fill pattern, which makes the right edge of the bars easier to discern, and a gradient fill pattern, which you can use if you share your workbook with colleagues who use Excel 2007.

Excel 2019 also draws data bars differently than in Excel 2007. Excel 2007 drew a very short data bar for the lowest value in a range and a very long data bar for the highest value. The problem was that similar values could be represented by data bars of very different lengths if there wasn't much variance among the values in the conditionally formatted range. In Excel 2019, data bars compare values based on their distance from zero, so similar values are summarized by using data bars of similar lengths.










 **TIP** Excel 2019 data bars summarize negative values by using bars that extend to the left of a baseline that the app draws in a cell.

Color scales compare the relative magnitude of values in a cell range by applying colors from a two-color or three-color set to your cells. The intensity of a cell's color reflects the value's tendency toward the top or bottom of the values in the range.

Call Volume	
Northeast	13,769
Atlantic	19,511
Southeast	11,111
North Central	24,972
Midwest	11,809
Southwest	20,339
Mountain West	20,127
Northwest	12,137
Central	20,047

*Apply a color scale to emphasize the magnitude of values within a cell range.*

Finally, icon sets are collections of three, four, or five images that Excel displays when certain rules are met.

Call Volume	
Northeast	 13,769
Atlantic	 19,511
Southeast	 11,111
North Central	 24,972
Midwest	 11,809
Southwest	 20,339
Mountain West	 20,127
Northwest	 12,137
Central	 20,047

*Icon sets show how values compare to a standard.*

When icon sets were introduced in Excel 2007, you could apply an icon set as a whole, but you couldn't create custom icon sets or choose to have Excel 2007 display no icon if the value in a cell met a criterion. In Excel 2019, you can display any icon from any set for any criterion or display no icon. Plus, you can edit the icon set in other ways so it summarizes your data exactly as you want it to.

When you click a color scale or icon set in the Conditional Formatting Rules Manager and then click the Edit Rule button, you can control when Excel applies a color or icon to your data.



**IMPORTANT** Do not include cells that contain summary formulas in your conditionally formatted ranges. The values, which could be much higher or lower than your regular cell data, could throw off your comparisons.