## Collaborate in Excel – Print and Share

### Print rows with column headers on top of every page

If a worksheet spans more than one page, you can print row and column headers or labels (also called print titles) on every page. For example, you can repeat the first row of column headers on all pages when you have large, complex worksheets.

1. Select the worksheet that you want to print.
2. On the **Page Layout** tab, in the **Page Setup** group, click **Print Titles**.
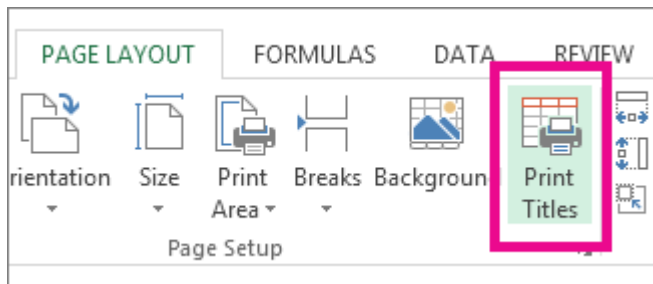


**Note:** The **Print Titles** command will appear dimmed if you are working in cell editing mode, if a chart is selected on the same worksheet, or if you do not have a printer installed.

3. On the **Sheet** tab, under **Print titles**, do one or both of the following:
   - In the **Rows to repeat at top** box, type the reference of the rows that contain the column labels.
   - In the **Columns to repeat at left** box, type the reference of the columns that contain the row labels.

For example, if you want to print column labels at the top of every printed page, you could type **$1:$1** in the **Rows to repeat at top** box.

Tip: You can also click the **Collapse Dialog** button  at the right end of the **Rows to repeat at top** and **Columns to repeat at left** boxes, and then select the title rows or columns that you want to repeat in the worksheet. After you finish selecting the title rows or columns, click the **Collapse Dialog** button  again to return to the dialog box.

**Note:** If you have more than one worksheet selected, the **Rows to repeat at top** and **Columns to repeat at left** boxes are not available in the **Page Setup** dialog box. To cancel a selection of multiple worksheets, click any unselected worksheet. If no unselected sheet is visible, right-click the tab of a selected sheet, and then click **Ungroup Sheets**.

## Collaborate in Excel – Print and Share

### Insert, move, or delete page breaks

Page breaks are dividers that break a worksheet into separate pages for printing. Microsoft Excel inserts automatic page breaks based on the paper size, margin settings, scale options, and the positions of any manual page breaks that you insert. To print a worksheet with the exact number of pages that you want, you can adjust the page breaks in the worksheet before you print it.

**Tips:**

- Although you can work with page breaks in **Normal** view, we recommend that you use **Page Break Preview** view to adjust page breaks so that you can see how other changes that you make (such as page orientation and formatting changes) affect the automatic page breaks.
- To override the automatic page breaks that Excel inserts, you can insert your own manual page breaks, move existing manual page breaks, or delete any manually-inserted page breaks. You can also quickly remove all the manually-inserted page breaks. After you finish working with page breaks, you can return to **Normal** view.

In **Page Break Preview**, dashed lines are page breaks Excel automatically added. Solid lines are page breaks that were added manually.
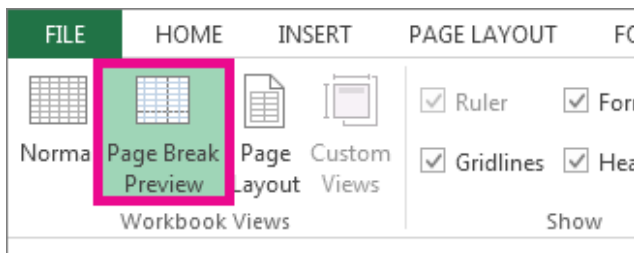


### Insert a page break

1. Click the worksheet that you want to print.
2. On the **View** tab, in the **Workbook Views** group, click **Page Break Preview**.
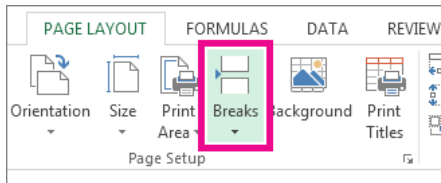
You can also click **Page Break Preview** 🔲 on the status bar.

3. Do one of the following:

   ▪ To insert a vertical page break, select the row below where you want to insert the page break.

   ▪ To insert a horizontal page break, select the column to the right of where you want to insert the page break.

4. On the **Page Layout** tab, in the **Page Setup** group, click **Breaks**.



5. Click **Insert Page Break**.

You can also right-click the row or column below or to the right of where you want to insert the page break, and then click **Insert Page Break**.

If manual page breaks that you insert do not take effect, it may be that the **Fit To** scaling option has been selected on the **Page** tab of the **Page Setup** dialog box (**Page Layout** tab, **Page Setup** group, Dialog Box Launcher 🔲 ). To use the manual page breaks, change the scaling to **Adjust to** instead.


**Move a page break**

1. To verify that drag-and-drop is enabled, do the following:

   a. Click the **File** tab > **Options**. In Excel 2007, click **Microsoft Office Button** 🔘 , and then click **Excel Options**.

   b. In the **Advanced** category, under **Editing options**, select the **Enable fill handle and cell drag-and-drop** check box, and then click **OK**.

2. Click the worksheet that you want to modify.

3. On the **View** tab, in the **Workbook Views** group, click **Page Break Preview**.
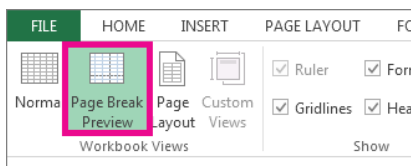


You can also click **Page Break Preview** 🔲 on the status bar.

4. To move a page break, drag the page break to a new location.

**Note:** Moving an automatic page break changes it to a manual page break.

**Delete a page break**

1.  Select the worksheet that you want to modify.
2.  On the **View** tab, in the **Workbook Views** group, click **Page Break Preview**.



You can also click **Page Break Preview** on the status bar.

3.  Do one of the following:
    ▪ To delete a vertical page break, select the column to the right of the page break that you want to delete.
    ▪ To delete a horizontal page break, select the row below the page break that you want to delete.

**Note:** You cannot delete an automatic page break.

4.  On the **Page Layout** tab, in the **Page Setup** group, click **Breaks**.



5.  Click **Remove Page Break**.



You can also remove a page break by dragging it outside of the page break preview area (to the left past the row headers, or up past the column headers). If you cannot drag page breaks, make sure that the drag-and-drop feature is enabled.

## Collaborate in Excel – Print and Share

**Remove all manually-inserted page breaks**

**Note:** This procedure resets the worksheet to display only the automatic page breaks.

1. Click the worksheet that you want to modify.

2. On the **View** tab, in the **Workbook Views** group, click **Page Break Preview**.



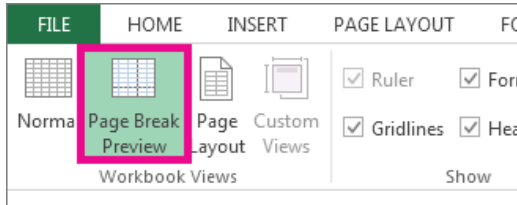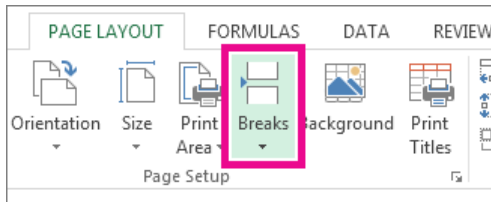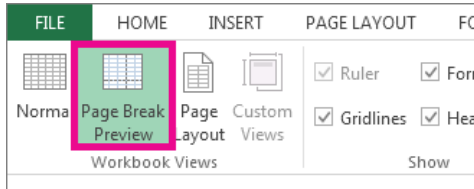You can also click **Page Break Preview** on the status bar.

3. On the **Page Layout** tab, in the **Page Setup** group, click **Breaks**.
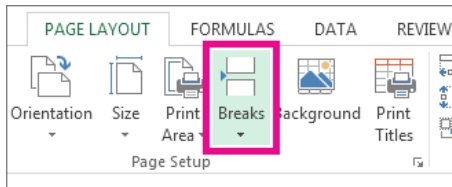


4. Click **Reset All Page Breaks**.

**Tip:** You can also right-click any cell on the worksheet, and then click **Reset All Page Breaks**.

**Return to Normal view**

▪ To return to Normal view after you finish working with the page breaks, on the **View** tab, in the **Workbook Views** group, click **Normal**.

You can also click **Normal** on the status bar.

▪ After working with page breaks in **Page Break Preview** view, you may still see the page breaks in **Normal** view because page breaks have been turned on automatically. To hide the page breaks, close and reopen the workbook without saving it.

▪ Page breaks remain visible when you close and reopen the workbook after saving it. To turn them off, click the **File** tab, click **Options**, click the **Advanced** category, scroll down to the **Display options for this worksheet** section, and clear the **Show page breaks** check boxDisplay or hide page breaks in Normal view

1. Click the **File** tab > **Options**. In Excel 2007, click the **Microsoft Office Button** , and then click **Excel Options**.

2. In the **Advanced** category, under **Display options for this worksheet**, select or clear the **Show page breaks** check box to turn page breaks on or off in Normal view.

## Collaborate in Excel – Print and Share

### Scale a worksheet for printing

If your worksheet has a lot of columns, you can use the **Scale to Fit** options to reduce the size of the worksheet to better fit the printed page.

Follow these steps:

1. Click the **Page Layout** tab on the ribbon.

2. In the **Scale to Fit** group, in the **Width** box, select **1 page**, and in the **Height** box, select **Automatic**. Columns will now appear on one page, but the rows may extend to more than one page.
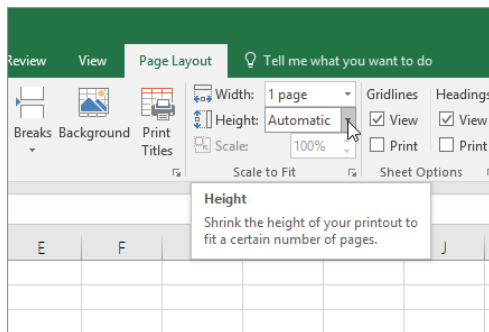


To print your worksheet on a single page, choose *1 page* in the **Height** box. Keep in mind, however, that the printout may be difficult to read because Excel shrinks the data to fit. To see how much scaling is used, look at the number in the **Scale** box. If it's a low number, you may need to make other adjustments before you print. For example, you may need to change the page orientation from portrait to landscape or target a larger paper size. For more information, see the section below to understand a few things about scaling a worksheet to fit a printed page.

3. To print your worksheet, press CTRL+P to open the **Print** dialog box, and then click **OK**.

**Things to know about scaling a worksheet**

For the best experience as you scale a worksheet, it is important to remember the following:

▪ If your worksheet has many columns, you may need to switch the page orientation from portrait to landscape. To do this, go to **Page Layout** > **Page Setup** > **Orientation**, and click **Landscape**.

▪ Consider using a larger paper size to accommodate many columns. To switch the default paper size, go to **Page Layout** > **Page Setup** > **Size**, and then choose the size you want.

▪ Use the **Print Area** command (**Page Setup** group) to exclude any columns or rows that you don't need to print. For example, if you want to print columns A through F, but not columns G through Z, set the print area to include only columns A through F.

▪ You can shrink or enlarge a worksheet for a better fit on printed pages. To do that, in **Page Setup**, click the window launcher button. Then, click **Scaling > Adjust to**, and then enter the percentage of the normal size that you want to use.

## Collaborate in Excel – Print and Share

**Note:** To reduce a worksheet to better fit the printed pages, enter a percentage that is smaller than 100%. To enlarge a worksheet to fit the printed pages, enter a percentage greater than 100%.

- Page Layout view isn't compatible with the **Freeze Panes** command. If you don't want to unfreeze the rows or columns in your worksheet, you can skip Page Layout view and instead use the **Fit to** options on the **Page** tab in the **Page Setup** dialog box. To do that, go to **Page Layout** tab, and in the **Page Setup** group, click the Dialog Box Launcher ⬒ at the bottom-right side. Optionally, press ALT+P, S, P on the keyboard.

- To print a worksheet on a specific number of pages, in **Page Setup**, click the small window launcher button. Then, under **Scaling**, in both of the **Fit to** boxes, enter the number of pages (wide and tall) on which you want to print the worksheet data.

**Notes:**

- Excel ignores manual page breaks when you use the **Fit to** option.
- Excel does not stretch the data to fill the pages.

- To remove a scaling option, go to **File** > **Print** > **Settings** > **No Scaling**.

**Scale a worksheet to print in a different font size**

When you print an Excel worksheet, you may find that the print font size is not what you expect.

Follow these steps to scale the worksheet for print by increasing or decreasing its font size.

1. In the worksheet, click **File** > **Print**.
2. Under **Settings**, click **Custom Scaling** > **Custom Scaling Options**.
3. Click **Page** and in the **Adjust to** box, choose a percentage by which you want to increase or decrease the font size.
4. Review your changes in **Print Preview** and—if you want a different font size—repeat the steps.

**Note:** Before you click **Print**, check the paper size setting in the printer properties, and also make sure the printer actually has paper in that size. If the paper size setting is different from the paper size in your printer, Excel adjusts the printout to fit the paper size in the printer and the printed worksheet might not match your Print Preview

In **Print Preview**, if the worksheet appears to be reduced to a single page, check if a scaling option like **Fit Sheet on One Page** has been applied. Refer to the section above to learn how to make adjustments.

## Collaborate in Excel – Print and Share

### Repeat specific rows or columns on every printed page

If a worksheet spans more than one printed page, you can label data by adding row and column headings that will appear on each print page. These labels are also known as print titles.

Follow these steps to add Print Titles to a worksheet:

1. On the worksheet that you want to print, in the **Page Layout** tab, click **Print Titles** , in the **Page Setup** group).
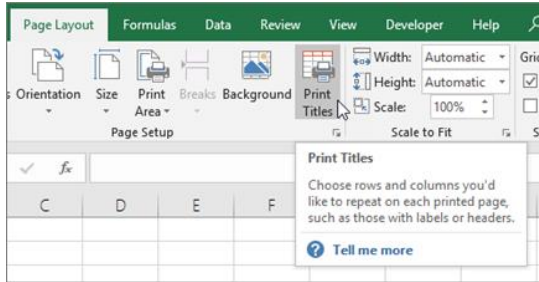


**Note:** The Print Titles command will appear dimmed if you are in cell editing mode, if a chart is selected on the same worksheet, or if you don't have a printer installed.

On the **Sheet** tab, under **Print titles**, do one—or both—of the following:

- In the **Rows to repeat at top** box, enter the reference of the rows that contain the column labels.
- In the **Columns to repeat at left** box, enter the reference of the columns that contain the row labels.
  For example, if you want to print column labels at the top of every printed page, you could type **$1:$1** in the **Rows to repeat at top** box.
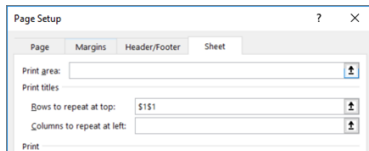


**Tip:** You can also click the **Collapse Popup Window** buttons at the right end of the **Rows to repeat at top** and **Columns to repeat at left** boxes, and then select the title rows or columns that you want to repeat in the worksheet. After you finish selecting the title rows or columns, click the **Collapse Dialog** button again to return to the dialog box.

**Note:** If you have more than one worksheet selected, the **Rows to repeat at top** and **Columns to repeat at left** boxes are not available in the **Page Setup** dialog box. To cancel a selection of multiple worksheets, click any unselected worksheet. If no unselected sheet is visible, right-click the tab of a selected sheet, and then click **Ungroup Sheets** on the shortcut menu.

## Collaborate in Excel – Print and Share

### Share your Excel workbook with others

Share a workbook with others, right within Excel. You can let them edit the workbook or just view it.

1. Select **Share**.
2. Select permissions and then **Apply**.
3. Add people.
4. Type a message if you like.
5. Select **Send**.

Click to watch the "Share a workbook" video.

**Comments and notes**

Excel for Microsoft 365 has changed the way comments work. Comments are now threaded, and allow you to have discussions with other people about the data. Notes are for making notes or annotations about the data, and work like comments used to work in earlier versions of Excel.

**Comments**

Comments have a Reply box. When people reply, you can see several comments connected together, showing a virtual conversation in the workbook. If you need to discuss data with other people, then use a comment.

**Add a comment**

1. Right-click a cell and click **New Comment**.
2. In the comment box, type your comment. You can also @mention someone to include them in the comment thread.
3. Move your cursor off of the cell.

The comment disappears, but a purple comment indicator remains. To see the comment again, hover over the cell.

**Review comments**

▪ Select the **Review** tab, and click **Previous Comment** or **Next Comment** to see each comment in sequence.

## Collaborate in Excel – Print and Share

**Show/Hide all comments at once**

- Select the **Review** tab, and click **Show Comments**. A new Comments task pane will load on the right displaying all your comments in order.

**Delete a comment**

- Click the **More thread actions** button (**...**) in the comment's upper right-hand corner, and select **Delete thread**.

**Resolve a thread**

- Click the **More thread actions** button (**...**) in the comment's upper right-hand corner, and select **Resolve thread**.
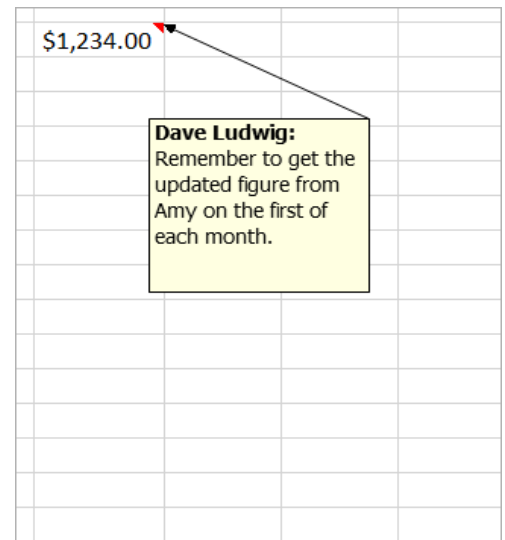
**Notes**

Notes (formerly called "comments" in earlier versions of Excel) don't have a Reply box. Notes are just for adding annotations or reminders in cells. If you don't need to have a discussion about the data, then use a note.



**Add a note**

1. Right-click a cell and click **New Note**.
2. In the note box, type your note.
3. Click outside the note.

The note box disappears, but a red note indicator remains. To see the note again, hover over the cell.

**Note:** To format your comment, highlight the text you want to change, right-click on the note and choose **Format Comment**.

**Review notes**

- Select the **Review** tab > **Notes**, and click **Previous Note** or **Next Note** to see each note in sequence.

**Show/Hide all notes at once**

- Select the **Review** tab > **Notes** >**Show All Notes**. This will toggle your notes on and off.

**Move a note**

- Click on a note's border, then drag it.

**Resize a note**

- Click on a note's border, then drag one of the sizing handles on its side or corner.

**Delete a note**

- Click on the note's border, and press Delete.

**Convert to Comments**

- If you want to take advantage of threaded comments in an existing note, select the **Review** tab

## Collaborate in Excel – Print and Share

**Collaborate on Excel workbooks at the same time with co-authoring**

You and your colleagues can open and work on the same Excel workbook. This is called co-authoring. When you co-author, you can see each other's changes quickly—in a matter of seconds. And with certain versions of Excel, you'll see other people's selections in different colors. If you're using a version of Excel that supports co-authoring, you can select **Share** in the upper-right corner, type email addresses, and then choose a cloud location. But if you need more details, like which versions are supported and where the file can be stored, this article will walk you through the process.

**Step 1: Upload the workbook**

Using a web browser, upload or create a new workbook on OneDrive, OneDrive for Business, or a SharePoint Online library.

**Step 2: Share it**

1. If you uploaded the file, select the filename to open it. The workbook will open in a new tab in your web browser.
2. Select the **Open in Desktop App** button.
3. When the file opens in the Excel desktop app, you may see a yellow bar which says the file is in **Protected View**. Select the **Enable Editing** button if that's the case.
4. Select **Share** in the upper-right corner.
5. By default, all recipients will be able to edit the workbook, however, you can change the settings by selecting the **can edit** option.
6. Type email addresses in the address box, and separate each with a semicolon.
7. Add a message for your recipients. This step is optional.
8. Select **Send**.

**Note:** If you want to send the link yourself, don't select the **Send** button. Instead, select **Copy link** at the bottom of the pane.

**Step 3: Other people can open it**

If you selected the **Share** button, people will receive an email message inviting them to open the file. They can select the link to open the workbook. A web browser will open, and the workbook will open in Excel for the web. If they want to use the Excel desktop app to co-author, they can select **Edit in Desktop App**. However, they'll need a version of the Excel app that supports co-authoring. Excel for Android, Excel for iOS, Excel Mobile, and Excel for Microsoft 365 subscribers are the versions that currently support co-authoring. If they don't have a supported version, they can edit in the browser.

> **Note:** If they're using the latest version of Excel, PowerPoint, or Word there's an easier way—they can select **File** > **Open** and select **Shared with Me**.

# Collaborate in Excel – Print and Share

**Step 4: Co-author with others**

With the file still open in Excel, make sure that **AutoSave** is on in the upper-left corner. When others eventually open the file, you'll be co-authoring together. You know you're co-authoring if you see pictures of people in the upper-right of the Excel window. (You may also see their initials, or a "G" which stands for guest.)
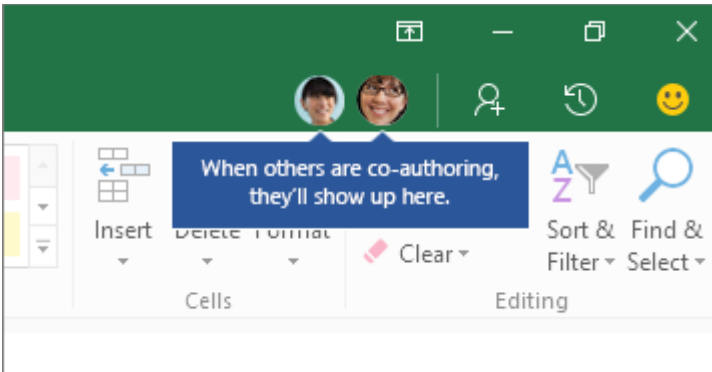


Co-authoring tips:

- You might see other people's selections in different colors. This happens if they're using Excel for Microsoft 365 subscribers, Excel for the web, Excel for Android, Excel Mobile, or Excel for iOS. If they're using another version, you won't see their selections, but their changes will appear as they're working.
- If you see other people's selections in different colors, they'll show up as blue, purple and so on. However, your selection will always be green. And on other people's screens, their own selections will be green as well. If you lose track of who's who, rest your cursor over the selection, and the person's name will be revealed. If you want to jump to where someone is working, select their picture or initials, and then select the **Go to** option.

Click to watch the "Co-Authoring" video.

**See files others have shared with you**

To see the files that others have shared with you:

1. Open Word, Excel, or PowerPoint. If you already have a document or workbook open, select **File**.
2. Scroll down and select the **Shared with Me** tab, or select **Open** > **Shared with Me**.

**Note:** The Shared with Me list shows only documents from **OneDrive – Personal**, **OneDrive for Business** and **SharePoint Online**.
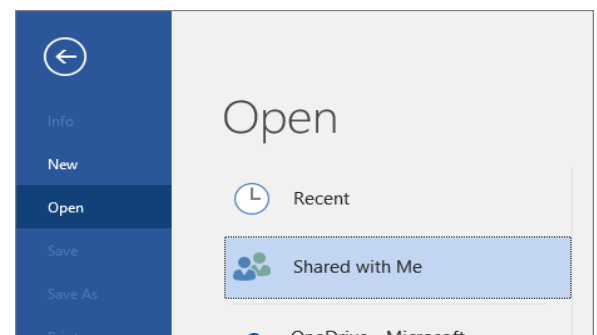
## Collaborate in Excel – Print and Share

### Protect files and worksheets

**Protect an Excel file**

To prevent others from accessing data in your Excel files, protect your Excel file with a password.

1. Select **File** > **Info**.
2. Select the **Protect Workbook** box and choose **Encrypt with Password.**
3. Enter a password in the **Password** box, and then select **OK**.
4. Confirm the password in the **Reenter Password** box, and then select **OK**.

**Warning:**

- Microsoft cannot retrieve forgotten passwords, so be sure that your password is especially memorable.
- There are no restrictions on the passwords you use with regards to length, characters or numbers, but passwords are case-sensitive.
- It's not always secure to distribute password-protected files that contain sensitive information such as credit card numbers.
- Be cautious when sharing files or passwords with other users. You still run the risk of passwords them falling into the hands of unintended users. Remember that locking a file with a password does not necessarily protect your file from malicious intent.
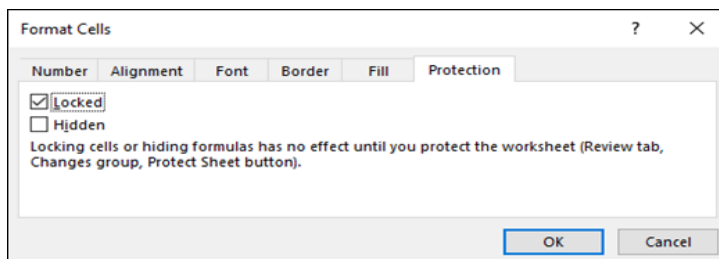
**Protect a worksheet**

Enable worksheet protection

Worksheet protection is a two-step process: the first step is to unlock cells that others can edit, and then you can protect the worksheet with or without a password.

**Step 1: Unlock any cells that needs to be editable**

1. In your Excel file, select the worksheet tab that you want to protect.
2. Select the cells that others can edit.
3. Right-click anywhere in the sheet and select **Format Cells** (or use **Ctrl+1**, or **Command+1** on the Mac), and then go to the **Protection** tab and clear **Locked**.

**Step 2: Protect the worksheet**

Next, select the actions that users should be allowed to take on the sheet, such as insert or delete columns or rows, edit objects, sort, or use AutoFilter, to name a few. Additionally, you can also specify a password to lock your worksheet. A password prevents other people from removing the worksheet protection—it needs to be entered to unprotect the sheet. Given below are the steps to protect your sheet.

1. On the **Review** tab, click **Protect Sheet**.



2. In the **Allow all users of this worksheet to** list, select the elements you want people to be able to change.
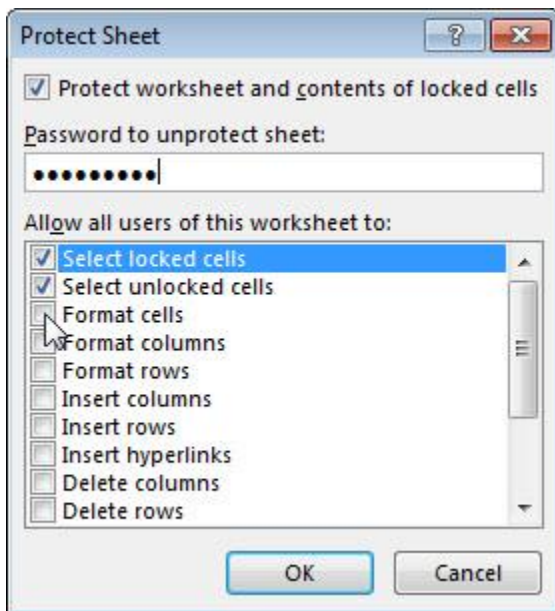
## Collaborate in Excel – Print and Share

### Convert to PDF

**Save or convert to PDF**

1. Click **File** > **Save As**.

   To see the **Save As** dialog box in Excel 2013 or Excel 2016, you have to choose a location and folder.

2. In the **File Name** box, enter a name for the file if you haven't already.

3. In the **Save as type** list, click **PDF (\*.pdf)**.

   - To open in the selected format after saving, select the **Open file after publishing check box**.
   - If the document requires high print quality, click **Standard (publishing online and printing)**.
   - If file size is more important than print quality, click **Minimum size (publishing online)**.

4. Click **Options** to set the page to be printed, to choose whether markup should be printed, and to select output options. Click **OK** when finished.

5. Click **Save**.

**Notes:**

- To view a PDF file, you must have a PDF reader installed on your computer such as the **Acrobat Reader**, available from Adobe Systems.
- This procedure also applies to Microsoft Excel Starter 2010.
- You can't save Power View sheets as PDF files.

For more information, please refer to the Microsoft training resource page HERE