

Microsoft Word for Computer Engineers

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Introduction

As a computer engineer, you probably work with more complex software than Microsoft Word on a regular basis. That being said, Word contains more utility than you might expect. From automatically managing the numbering of your captions to creating macros to automate tasks, Microsoft Word has a number of, at times non-obvious, tools to assist in creating your documents. This manual will hopefully aid you in getting as much out of Microsoft Word 2010 as possible, spanning the spectrum from basic document necessities to more niche software functions.

Acknowledgements

I would like to thank everyone in the class of English 380 for helping me learn how to create a technical manual. Special thanks to those students who gave feedback on my work, which I always found helpful, and to Professor Solberg, for teaching me how technical writing works.

I would also like to thank Laura Ockel for uploading the photo used on the cover of this manual for free on unsplash.com

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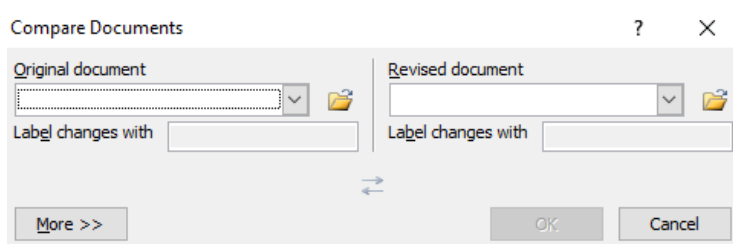
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Compare Different Versions of a Document

Word contains features that allow you to quickly review differences between document versions, helping you stay organized.

Turning on Compare

1. Click on the “Compare” button in the Review tab, and then click “Compare.”
2. Select the two documents you wish to compare in the menu that opens, and then press “OK.”



3. Several different windows open, one for the old and new versions of your document, one with both versions combined, and another detailing what was deleted or inserted.

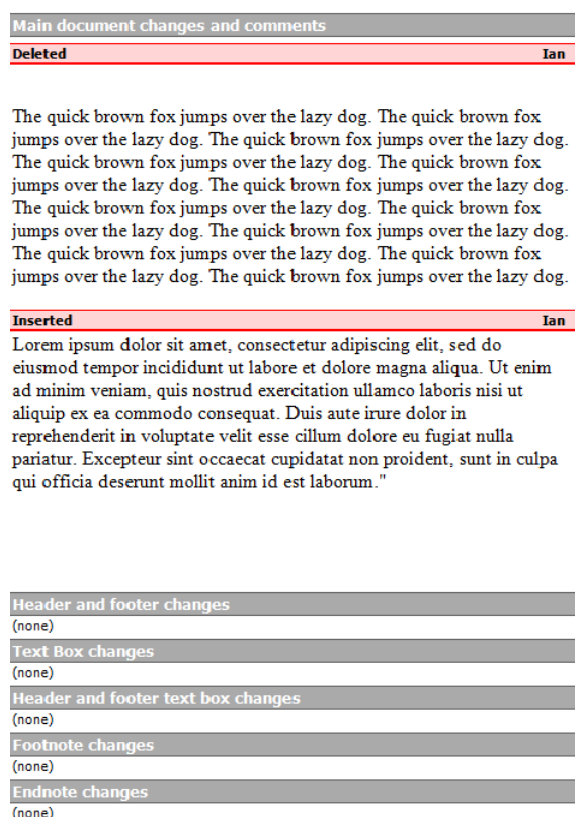


Figure 1. A window that opens detailing the specific edits made.

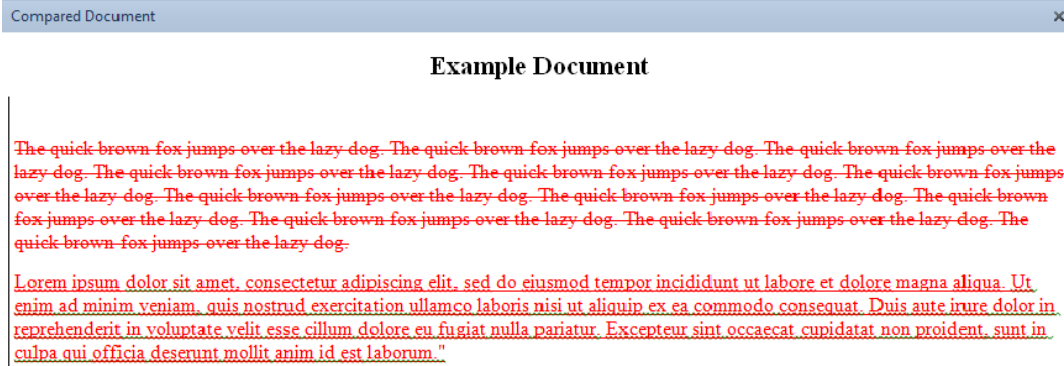


Figure 2. Each version is combined into one, with strikethroughs for deleted content.

Note: If you do not see multiple windows opening, press “Compare” in the Review tab, and then select “Show Source Documents” and click on which versions you wish to view.

4. Compare each document as necessary. New additions are in red, while deleted content has a strikethrough mark running through it, and all changed sections have a black line along the lefthand border.

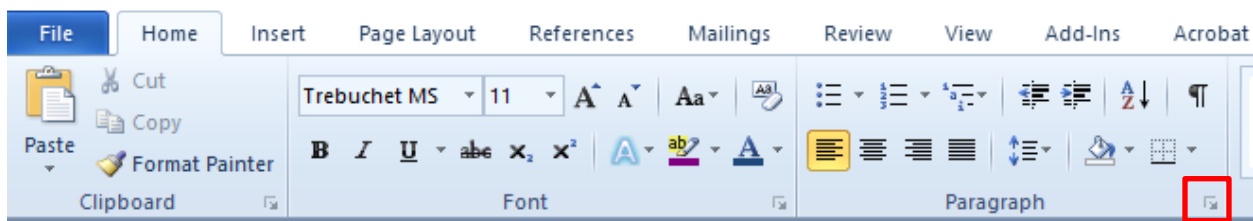
Note: When these windows open, they are in a new document. You are no longer in the original document you clicked “Compare” in.

Hanging Indents

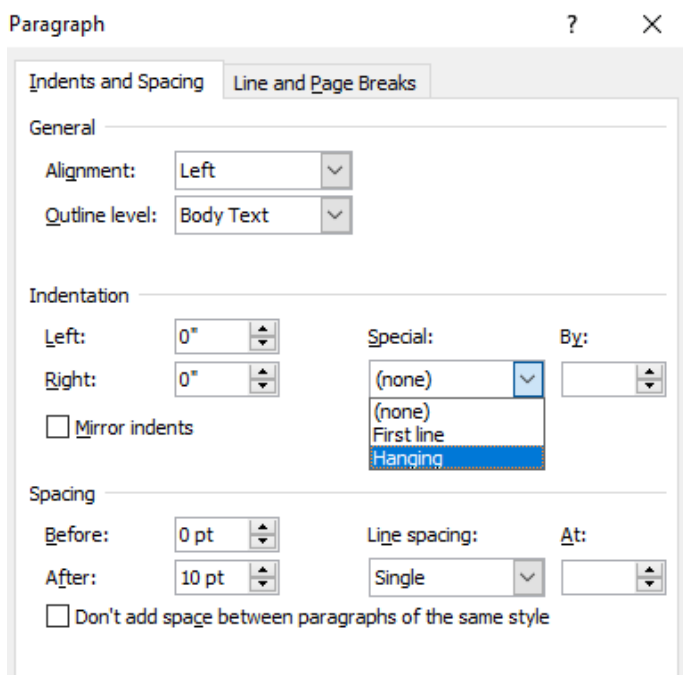
A hanging indent creates an indent on every line in a paragraph except the first. Hanging indents are important parts of different citation standards that allow the reader to quickly identify the various sources used.

Creating a Hanging Indent

1. Highlight the paragraph that you wish to give a hanging indent to.
2. Open the dialogue box in the Paragraph section under the Home tab.



3. Change the drop-down menu from (none) to Hanging under the Special drop-down menu, on the Indents and Spacing tab.



4. To the right of the Special drop-down menu, select your preferred indentation amount; the default and the amount most citation standards require is .5”

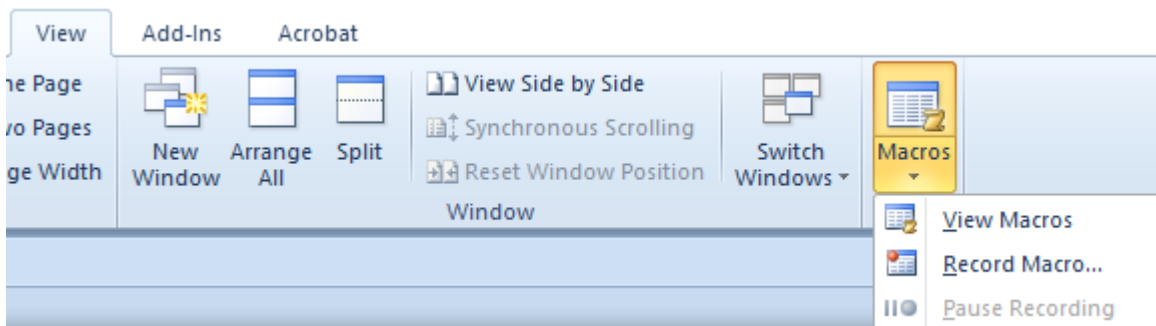
Note: An alternative way to access the Paragraph dialog box is to right-click on the page, and select “Paragraph.” You will still need to highlight the text you want to add a hanging indent to first.

Macros

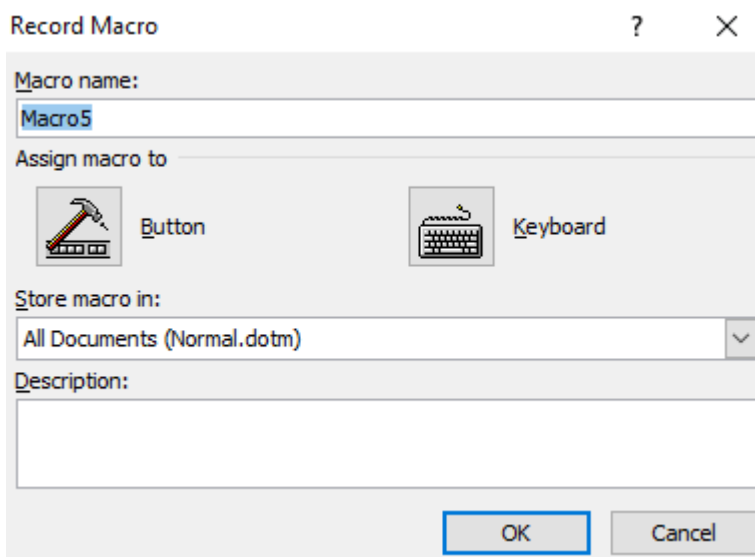
Macros allow you to automate repetitive tasks, potentially saving large amounts of time. First you must obtain a macro file, which you can create yourself in Word. Then you must run the file.

Creating Macros

1. In the View tab, click on the arrow under “Macros.”



2. Click “Record Macros.”
3. Title your Macro and select whether you want it available in all documents or only this particular document, and then click “OK.”

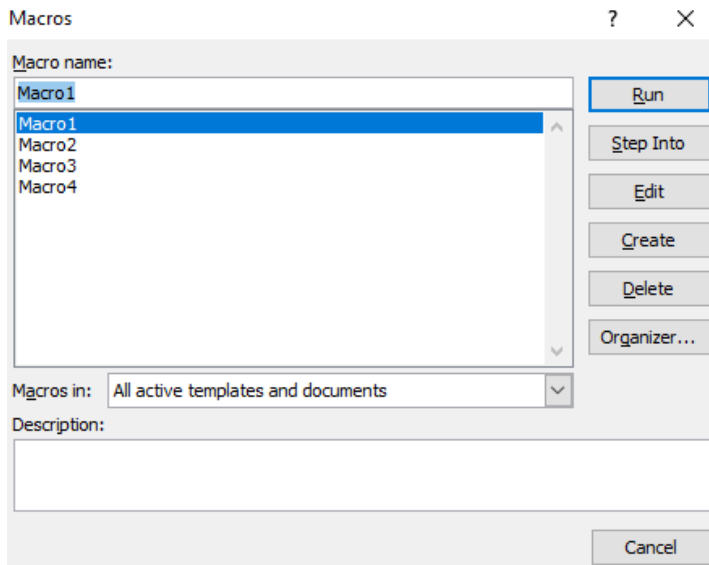


4. Edit your document in the way you would like your macro to run.
5. Click the arrow under “Macros” and click “Stop Recording” when you are finished creating your macro.

Note: In the menu under “Macros,” you can pause the macro instead of needing to stop it entirely.

Running Macros

1. Click on the arrow under “Macros” and select “View Macros.”



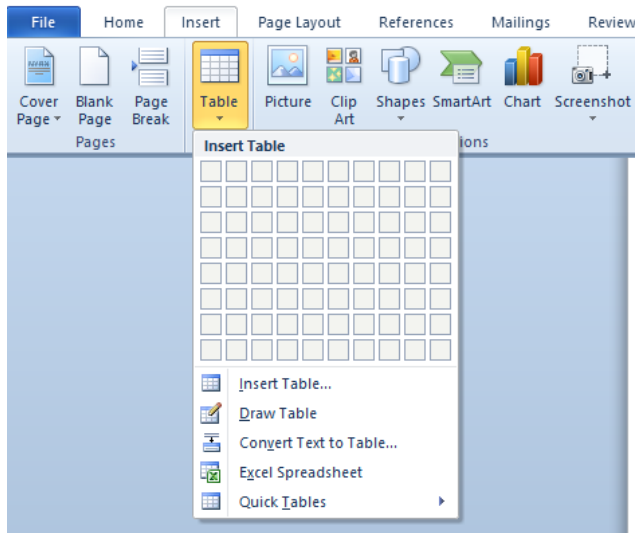
2. Select your macro from the list and click “Run.” Your macro performs the steps you made while recording it.

Creating Tables

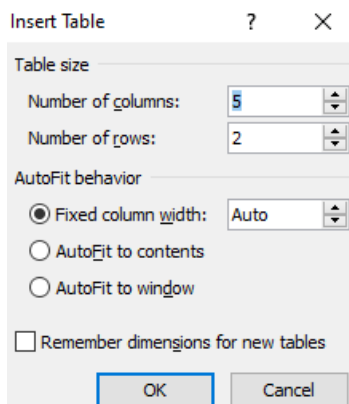
Word provides tools to quickly create and re-size tables. It also allows you to cross-reference the different tables within your document, so you can more easily keep track of your tables.

Creating Tables

1. Click the Insert tab, and then click “Table,” which opens the Table menu.



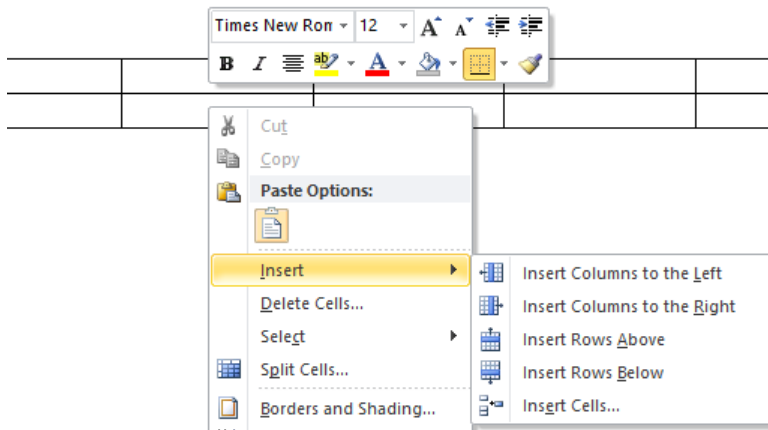
2. Click “Insert Table.”
3. Specify the amount of rows and columns in your table, and then click “Ok.”



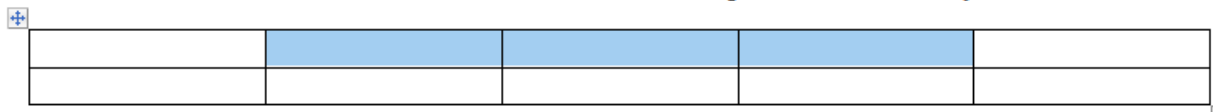
Note: You can also create tables from the menu in step 1 by moving your cursor over your desired table dimensions; this can only create up to a 10x8 table however.

Adding Rows or Columns

1. Click inside the adjacent cell to where you want to add your row or column.
2. Right click in this cell and select “Insert” and then the option that corresponds to what you want to add to the table.



Note: You can add multiple rows or columns at a time this way by clicking and dragging your cursor so the amount of rows or columns selected is equal to the amount you wish to add.



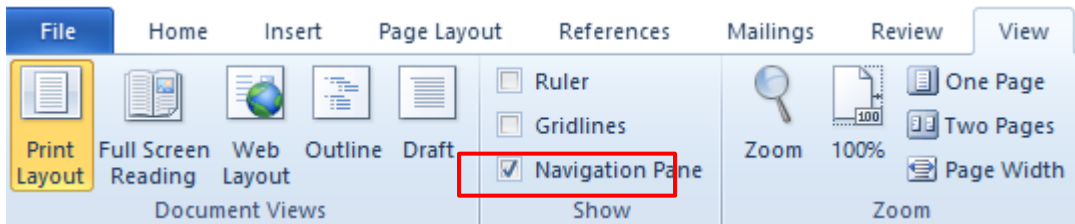
Here, clicking “add columns” would add three new columns.

Finding and Replacing Terms

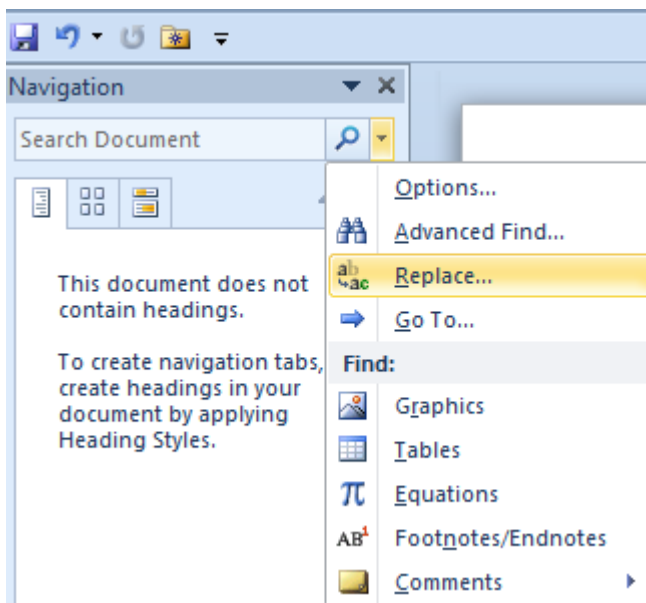
Microsoft Word contains a method to quickly look up a given search term in your document. This also allows you to replace all instances of this search term with another.

How to Find and Replace

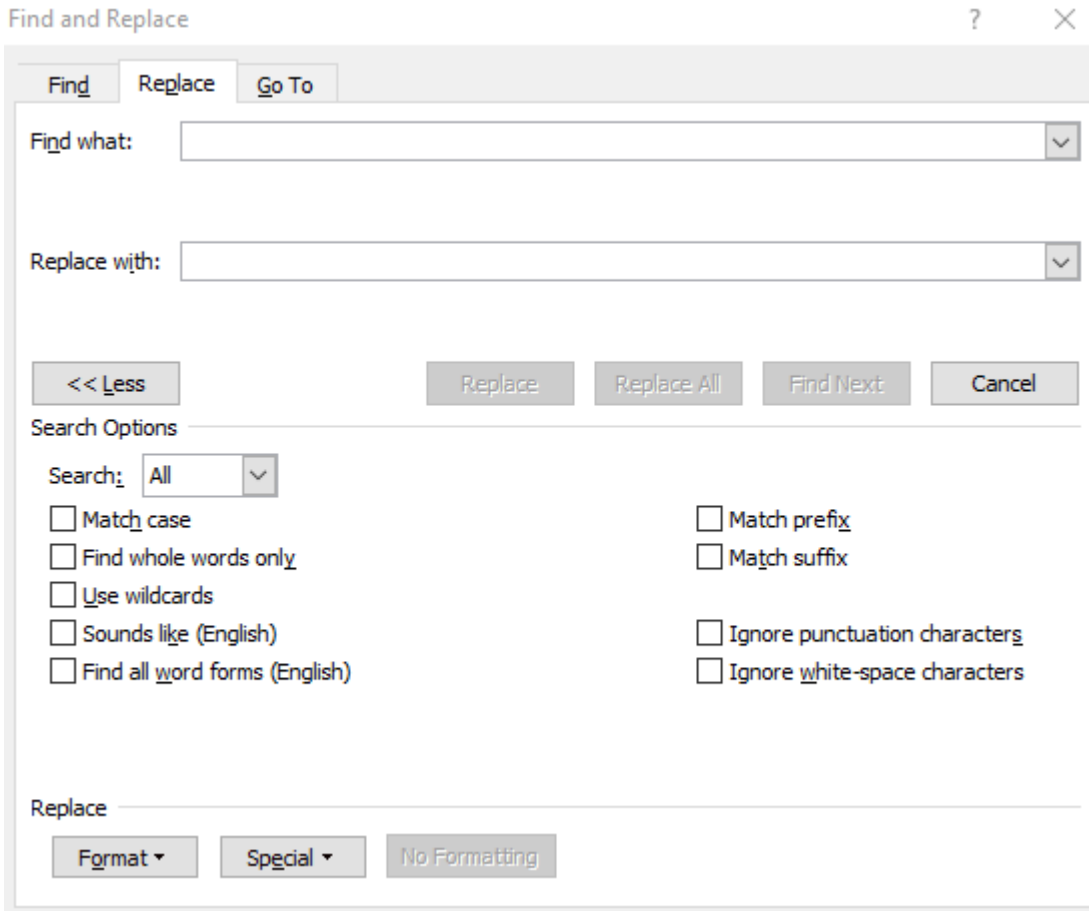
1. Press the View tab, and make sure the box titled “Navigation Pane” is checked. This opens the search tool on the left hand of Word.



2. Click on the arrow in the right of the search bar that appears and select “Replace”



3. Click on the Replace tab in the new window if you are not in it already.



4. Type in the word or search term you wish to search for under the “Find what” field, as well as the word you wish to replace it with under the “Replace with” field.
5. Use the “Find Next” button to selectively search for the term you wish to replace, or press “Replace all” to replace each instance of your term with the one you have chosen.

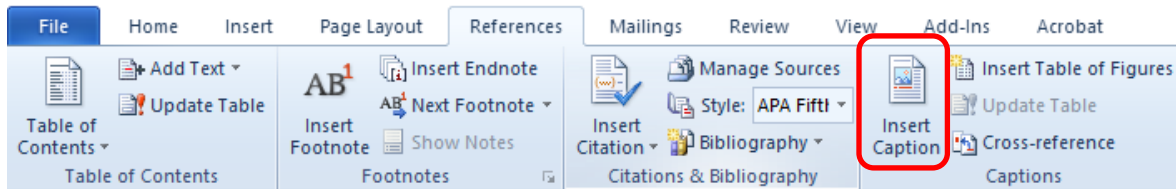
Note: Pressing Ctrl + F is a convenient shortcut to open the Navigation Pane.

Captions

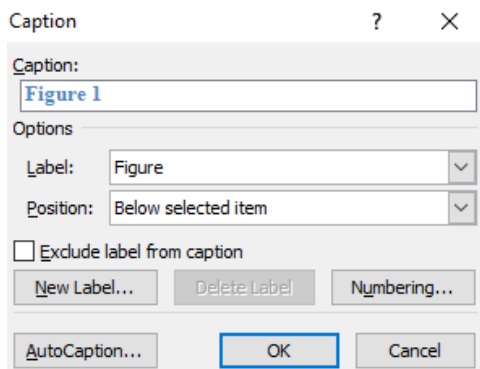
Word's built in caption tool helps you keep your image descriptions in order by automatically naming and numbering your graphics. If you have many images in your document, it can be difficult to rename or renumber every single one manually if you add or remove an image.

Insert a Caption

1. Click on the figure you wish to add a caption to.
2. Open the “References” tab and select “Insert Caption.”



3. Select which type of graphic you are adding a caption to in the “Label” drop-down menu, and whether to add this label above or below the graphic in the “Position” menu.



Note: You can also access the “Caption” window by right-clicking on a graphic and selecting “Insert Caption.”

Changing the Label

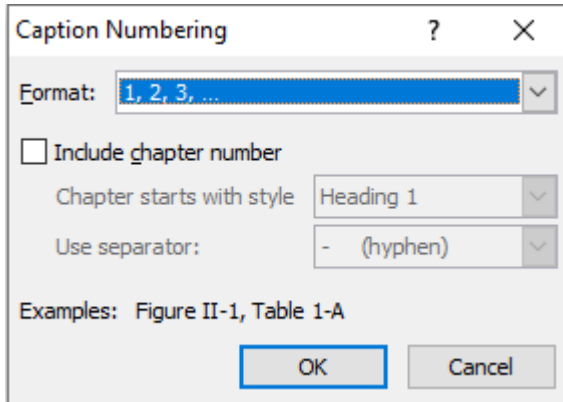
You may want to give your graphic a description other than “figure,” “equation,” or “table.”

1. Open the caption menu.
2. Click “New Label” and type your preferred description.

Changing Numbering System

Word allows you to number your graphics with alternative types of numbering systems, such as Roman numerals.

1. Open the caption menu.
2. Click the “Numbering” button.
3. Use the drop-down menu under “Format” to select a numbering system.

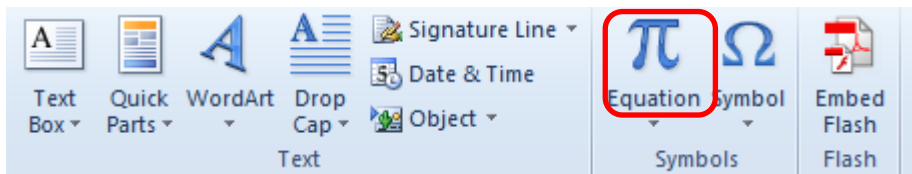


Equations

Word has a variety of settings related to using equations. Within the Equation tools there is also a list of symbols for convenient access, and pre-made math structures. You can also change how the equations appear with respect to the surrounding text.

Inserting Equations

1. Click the “Insert” tab, and then click on the (pi) symbol (not the arrow below it, which merely opens a handful of built-in equation structures) to access the “Equation” tools.



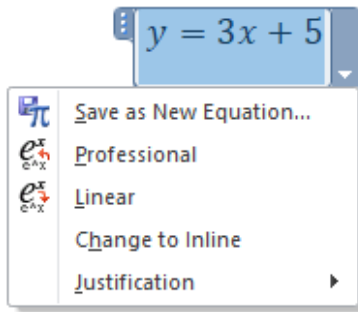
2. Type your equation into the box that appears.
3. Type your desired value into the blank boxes in the eType equation here. equations.

Note: Your equations can either have “Inline” or “Display” formatting, meaning they will function similar to regular text, or stand apart from it, respectively.

$\frac{7}{9}$ Example of an equation with “Inline” formatting.
Example of an equation with “Display” formatting. $\frac{7}{9}$

Changing “Inline” or “Display” Formatting

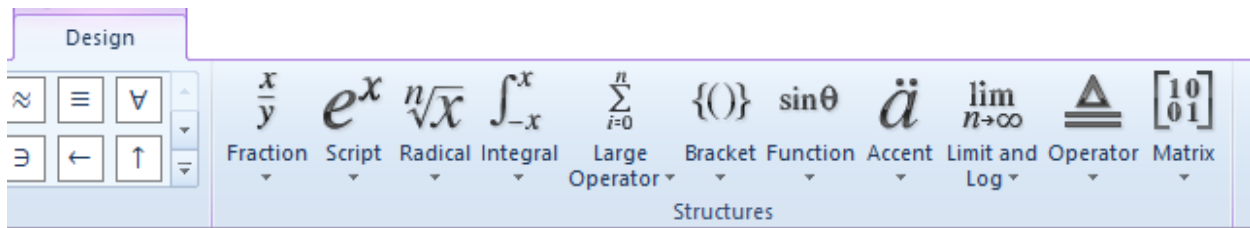
1. Click on your equation. An arrow appears on the right side of the equation.
2. Click this arrow, and in the drop down menu that opens, select either “Change to Inline” or “Change to Display.”



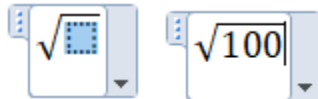
Note: If you do not see your option listed, then you are already on that setting.

Inserting Structures into Equations

1. Click on your equation.
2. Find the structure you wish to insert into your equation from the Equation Tools menu and click on it.



3. Type your desired values into the blank boxes of the structure.

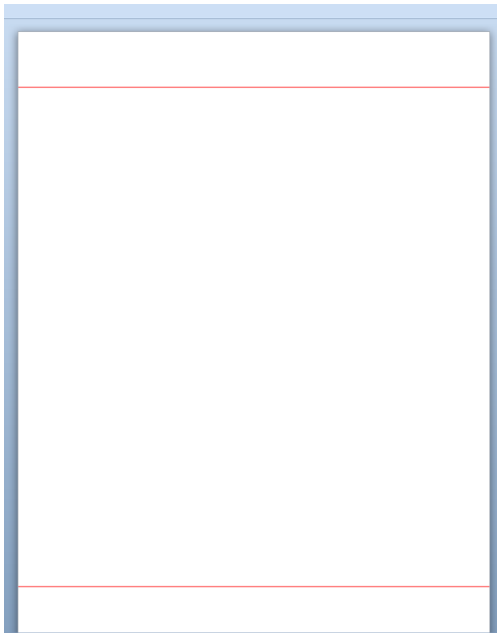


Numbering Pages in Word

Word has several options when it comes to numbering pages, depending on where you want the page numbers to appear and on which number you want them to begin.

How to Add Numbers to a Page

1. Double click near the very top or bottom of your page to bring up the “Header and Footer” toolbar (see Figure 1).
2. Select “Page Number” and then select either “Top of Page” or “Bottom of Page” depending on where you want the page numbers to appear.
3. Select your desired formatting preferences in the menu that appears.



Note: To open the header and footer Toolbar, click in the general area above the red line near the top of the document, or below the red line near the bottom the red line won't appear in your document and is only for example).

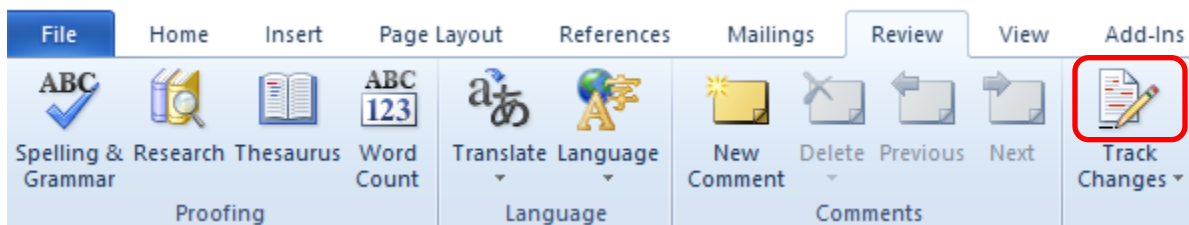
Figure 3.

Tracking Document Changes

Word includes helpful features to keep track of what changes are made to a document. When “Track Changes” is selected, all deleted text will have a line through it, and all additional added text will be of another color than black, depending on the author. You can then decide whether to incorporate these changes into the document or not.

Turning “Track Document Changes” On

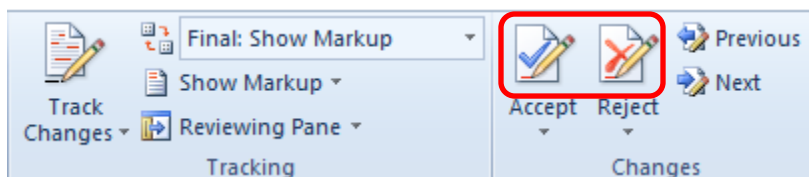
1. In the Review tab, click the pencil and paper icon above the text that says “Track Changes.”



2. Type into, or delete from the sections of your document you wish to change.

Accepting or Rejecting Changes

1. Click on the part of your document you wish to begin accepting or rejecting changes from.
2. Click the icon above either the text “Accept” or “Reject” in the Review tab, depending on whether you want to keep the changes or not. Word keeps moving to the next edit.



3. Continue for all the edits you wish to change.

Note: To move onto the next or previous edit without changing your current one, use either the “Previous” or “Next” buttons next to the “Accept” and “Reject” buttons.

Accepting or Rejecting All Changes at Once

1. In the Review tab, click the arrow below either “Accept” or “Reject.”
2. Click the bottom option in the menu that appears.

