Sensus
Accessibility Consultants

Accessible Microsoft Word Documents

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Microsoft Word provides various options for including accessibility information into the document to support individuals using assistive technologies. Such information also provides improved accessibility when converting the document into other formats (e.g., tagged PDF, EPUB, DAISY, etc.). Microsoft Word document accessibility can be improved for the following content items:

- Document Headings
- Descriptions for Images
- Tables for Data
- Multiple Columns
- Document Hyperlinks
- Mathematical Content

Document Headings

Headings can provide an organizational and navigational framework for a document's content. Headings, when used appropriately, can be effective to communicating a document's informational hierarchy and the relationship between different sections of content. For an individual using assistive technology, the presence of headings offers a simple mechanism to determine the organization of the content and to "jump" from heading to heading when navigating the document. Such headings can also be used as the navigational landmarks upon conversion into other formats, such as tagged PDF, HTML or EPUB.

Styles in MS Word 2010

1. From the Home tab in the top ribbon, select the appropriate heading level.
2. Headings should follow a logical structure that identifies content based on its importance in the document.
3. Maintain a sequential organization for headings, e.g., avoid having a heading 2 before a heading 1.
4. You can change the formatting of a heading by using the formatting palette.

Styles in MS Word for Mac 2011
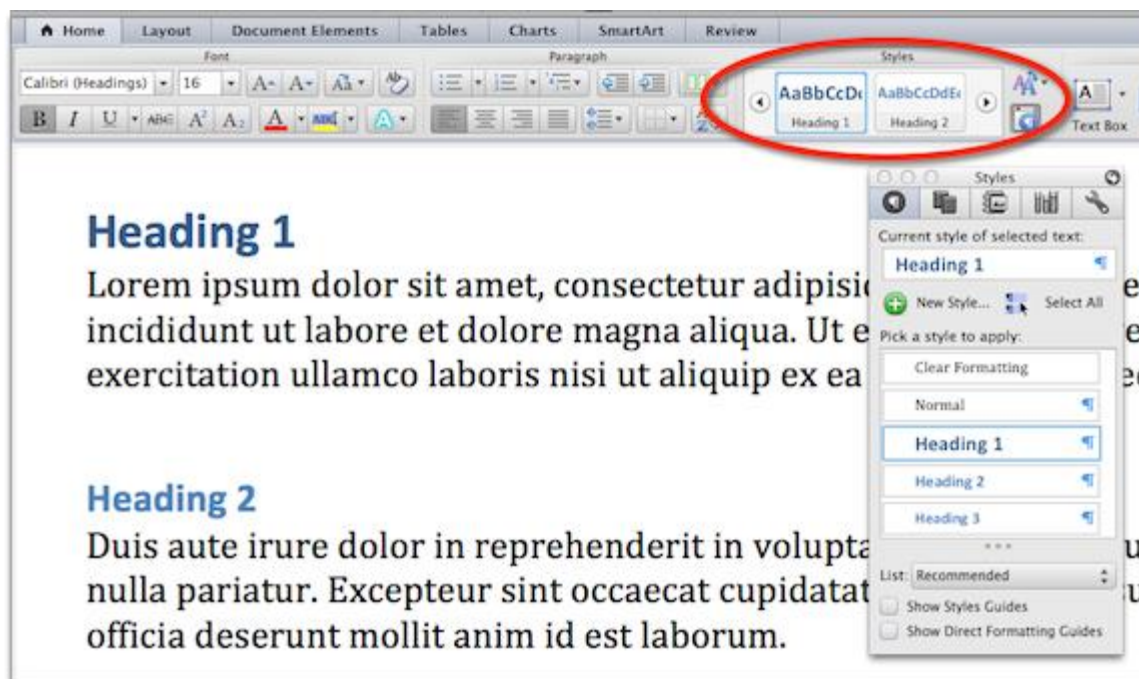
1. From the Home tab in the top ribbon, select the appropriate heading level. You can also set headings from the Styles formatting palette.
2. Headings should follow a logical structure that identifies content based on its importance in the document.
3. Maintain a sequential organization for headings, e.g., avoid having a heading 2 before a heading 1.
4. You can change the formatting of a heading by using the formatting palette.

Descriptions for Images

For images in MS Word, you can add a text description (also called "alt text") that communicates the purpose and/or content of the image. This information is then communicated to individuals who cannot view the image using their assistive technology. Image descriptions should be short and communicate the main purpose of the image. If a longer description of the image is necessary to fully explain its content, consider inserting a more detailed description of the image within the document text that precedes and/or follows the image.

Image descriptions in MS Word 2010
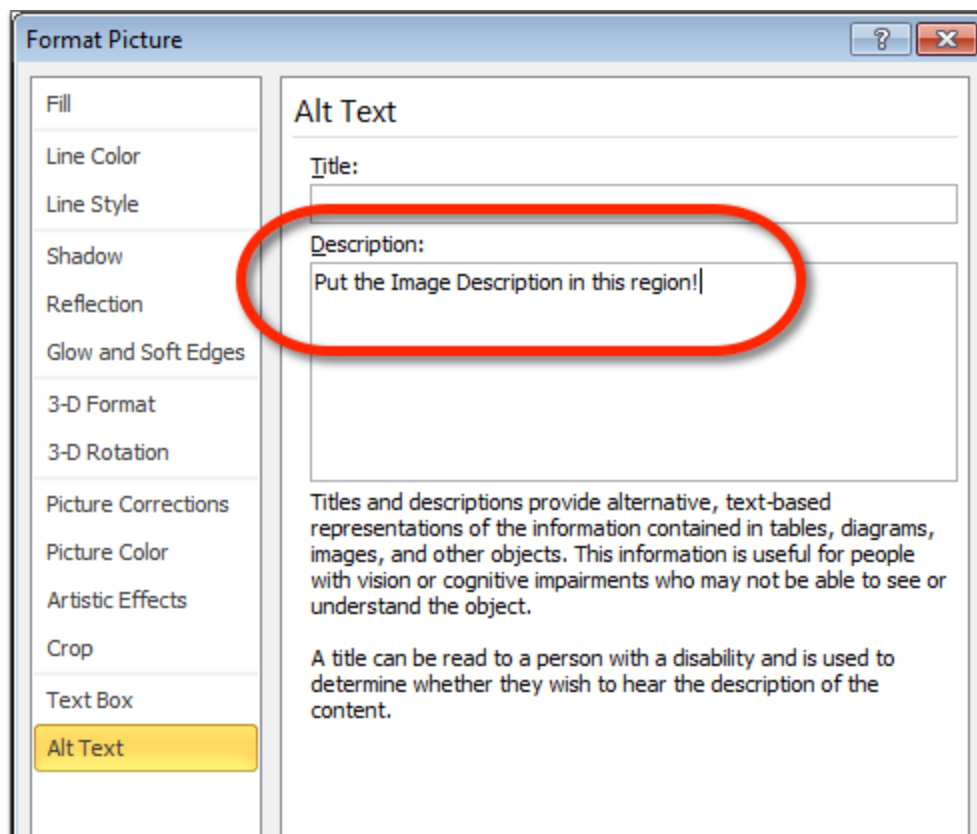
1. From the Insert ribbon, choose Picture and select the desired picture to add to the document.
2. Right-click on the image and choose Format Picture. In the left-side settings, choose Alt Text.
3. Enter the description of the image in the Description region. Leave the Title field empty.
4. The image description should focus on the purpose and/or content of the image in the document.

Image descriptions in MS Word for Mac 2011
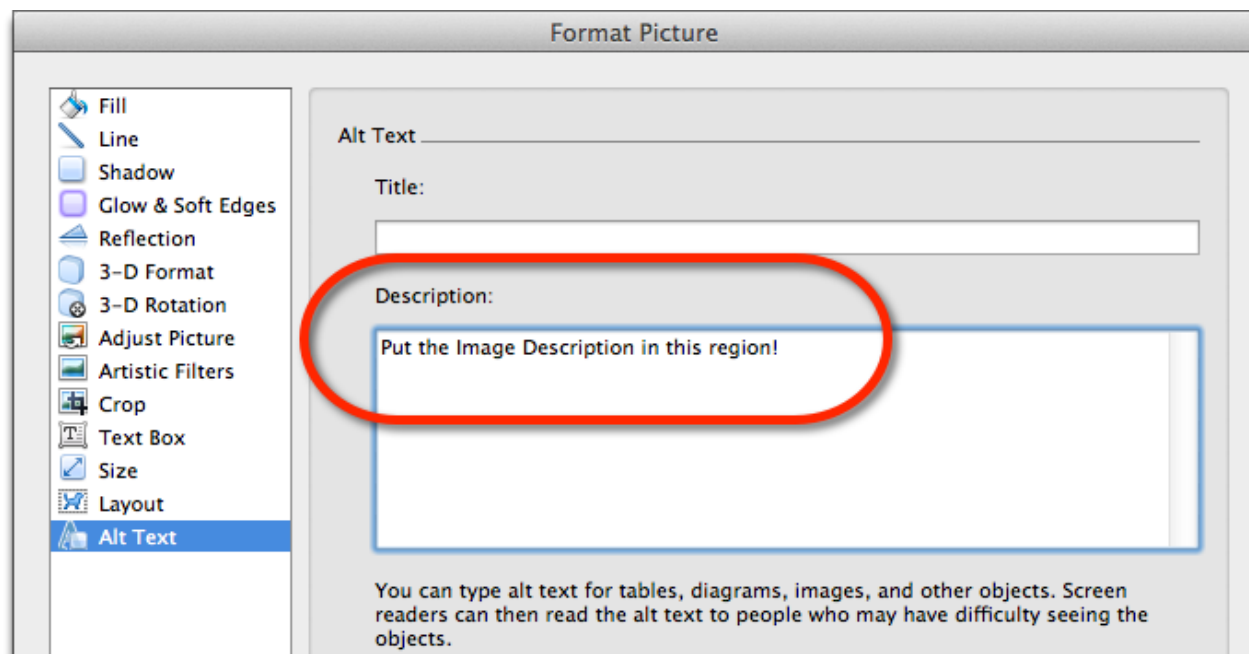
1. Choose **Insert > Photo > Picture from File...** and select the image to add to your document.
2. Right-click on the image and choose Format Picture. In the left-side settings, choose Alt Text.
3. Enter the description of the image in the Description region. Leave the Title field empty.
4. The image description should focus on the purpose and/or content of the image in the document.

Tables for Data

Tables should be used for information, not for controlling the layout or presentation of a MS Word document. To create a data table in MS Word, choose "Table" from the menu bar and select "Insert Table". Identify the appropriate columns and rows and enter in the data for your table. A simple data table is as follows:

City	State	Zip Code
San Jose	California	95101
San Francisco	California	94126
Denver	Colorado	80210

The first row of the table consists of the column headers. These help "define" the category of information for the data in that column. In MS Word, it is possible to identify the headings such that when the data table is interpreted by assistive computer technologies and read to the student, the information in the cells below each heading will have meaning and context.

## Table headings in MS Word 2010 and Word for Mac 2011
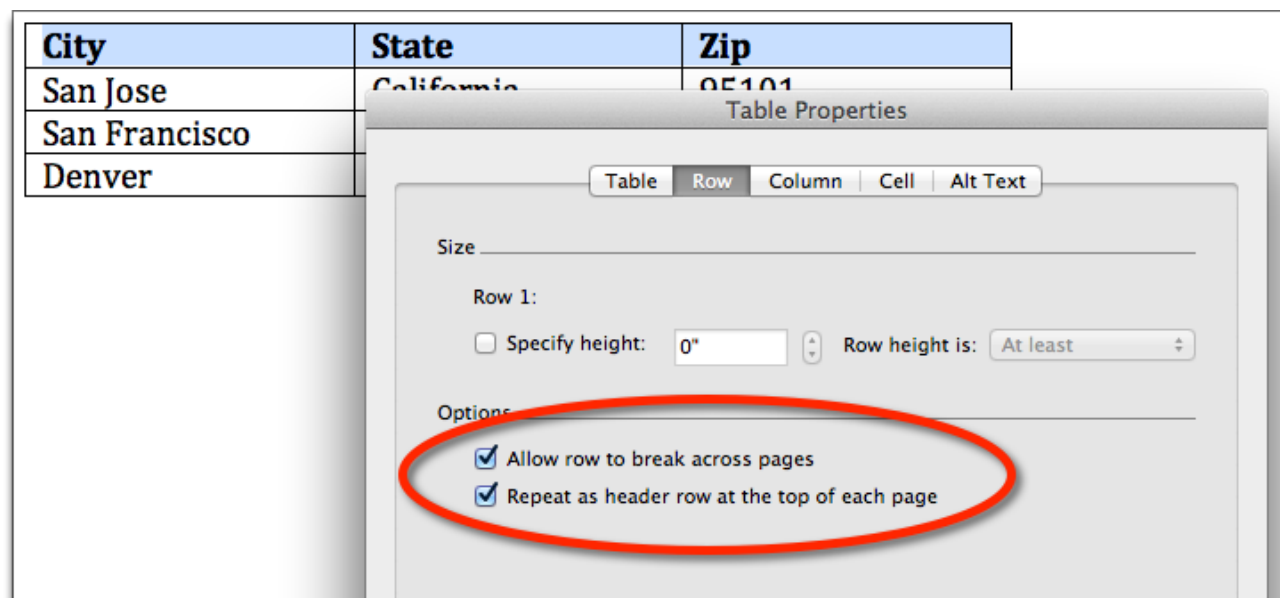
1. Create your data table using the Insert Table option under Table on the menu bar.
2. Select (highlight) the first row of the data table with your column headers.
3. Right click in the highlighted area and choose the Table Properties menu.
4. Under the Row tab, check the checkbox **Repeat as header row at the top of each page**.
5. Choose OK and return to the MS Word document.

At this time, there is only support for adding table heading information for table column headers, not row headers. This does not mean you are limited as to the types of tables you can create, rather this is a limitation in MS Word.

Multiple Columns

The Column tool provides the capability to create multi-column documents using MS Word. The advantage to using the Column tool is that multi-column documents will retain the proper reading order if using assistive technologies or when converting to other formats. Creating a multi-column layout using the tab-key, spacebar, or text boxes will result in an incorrect reading order and reflow of the document.

Columns in MS Word 2010 and Word for Mac 2011
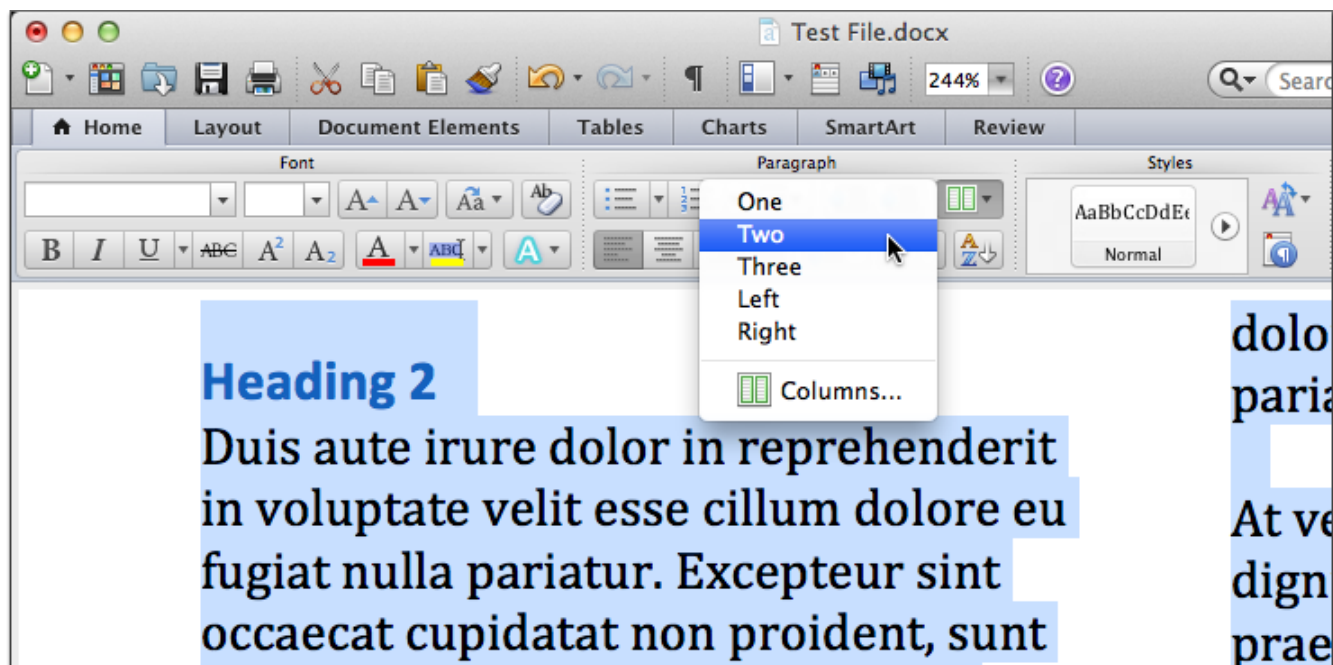
1. Select the text you wish to change from a single column to a multi-column layout.
2. Choose "Format" on the menu bar and select "Columns...". Alternatively, choose the Column tool in the Home ribbon.
3. Select the number of columns or set your specific spacing requirements. Return to the document to review the new layout.
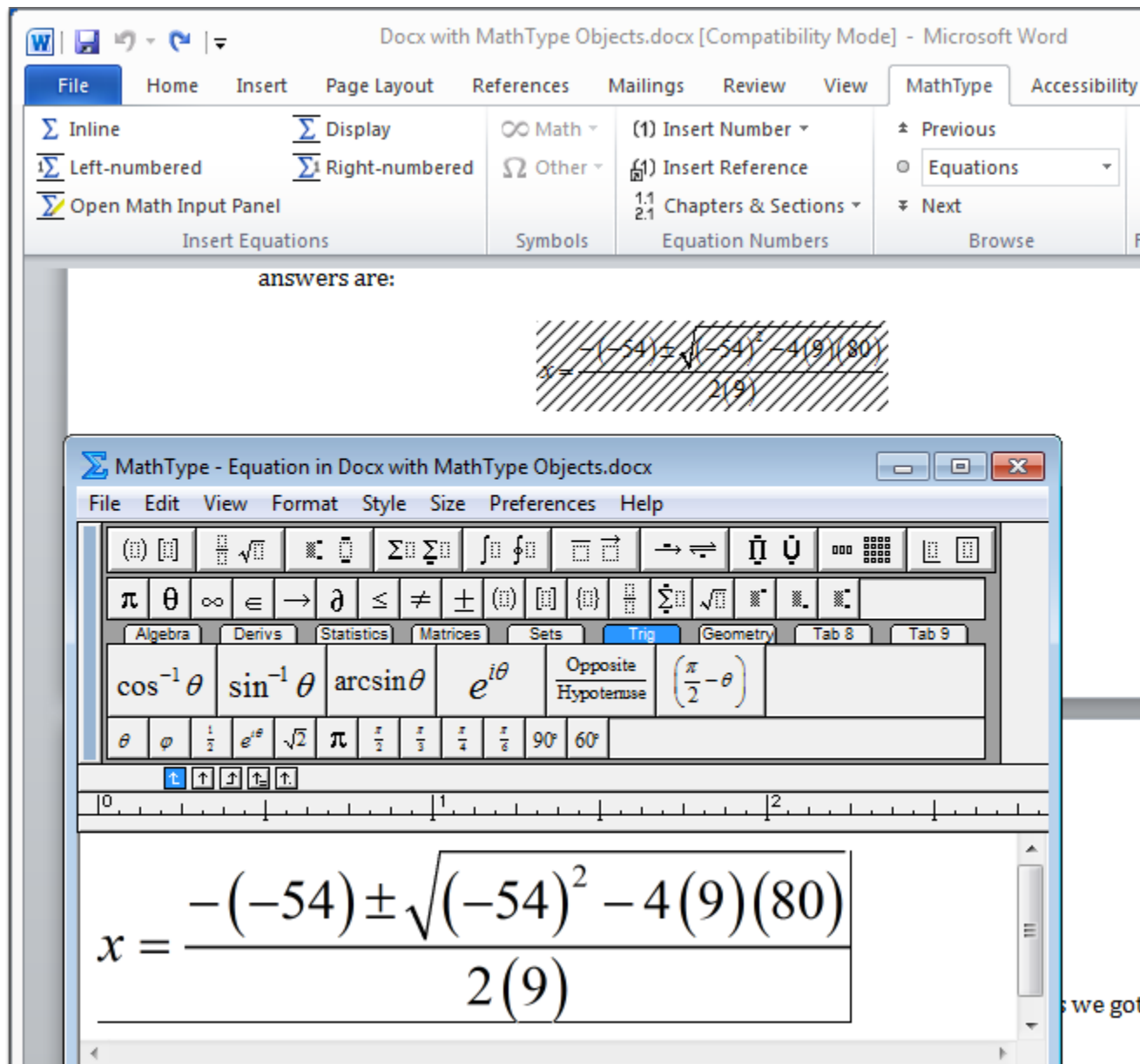
Document Hyperlinks

Documents containing hyperlinks to websites or other online resources can be improved by including hyperlink text that is understood by the reader. For instance, using the full hyperlink URL may not make sense to the reader without some context. You can modify the text to display in the document while retaining the hyperlink destination.
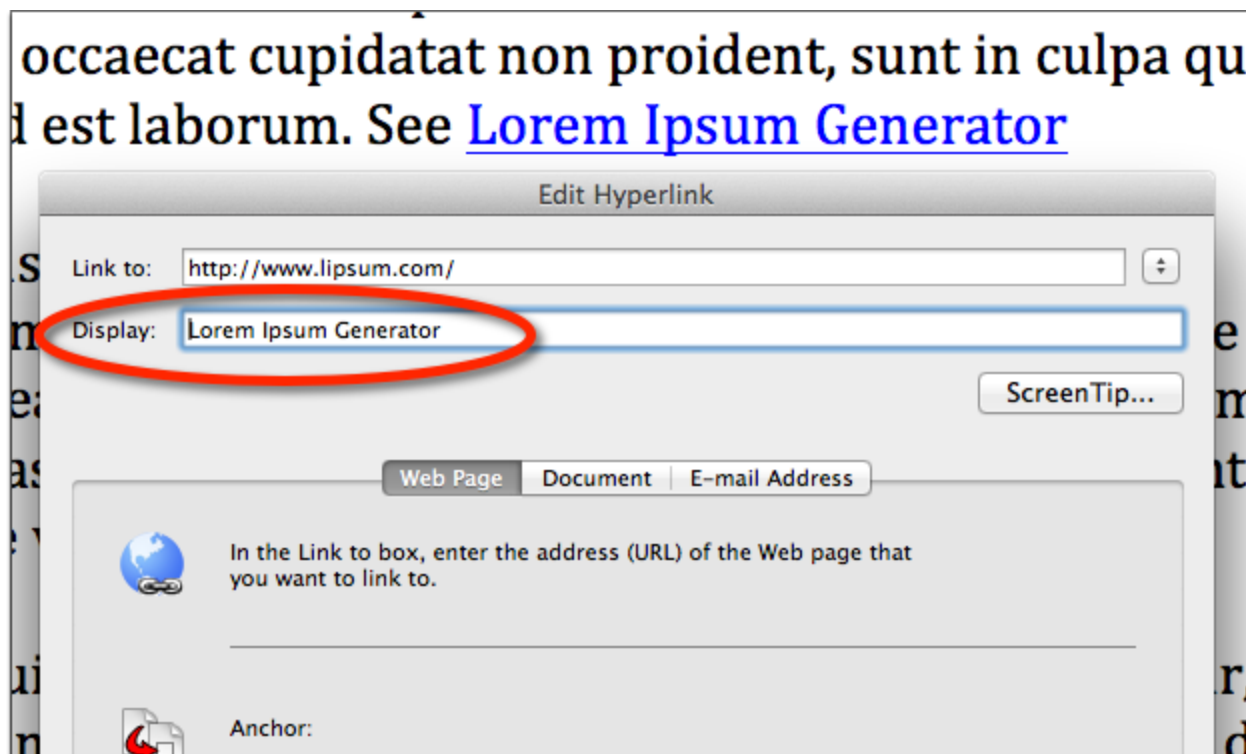
1. Right-click on the hyperlink text in the document and choose Edit Hyperlink, or press Ctrl+K (Mac: Cmd+K).
2. In the field "Display" (or "Text to Display" for MS Word 2010) enter the correct text information.
3. You can include both the text description and full URL if you prefer. Using the full URL is helpful for when the document is printed.

Mathematical Content

Microsoft Word documents that contain math equations using the MathType Equation Editor can be converted into other formats while retaining the accessibility functionality of the mathematical content. At this time, MS Word documents must be saved as DOCX and use the MathType Equation Editor to input the math equations. Alternatively, you can input equations using LaTeX, but these equations will need to be converted to MathType Equations before the document can be used with assistive technologies or submitted to SensusAccess.

Docx with MathType Objects.docx [Compatibility Mode] - Microsoft Word

File　Home　Insert　Page Layout　References　Mailings　Review　View　MathType　Accessibility

Σ Inline　　　　　　　　Σ Display　　　　　∞ Math　　(1) Insert Number　　± Previous
1Σ Left-numbered　　Σ¹ Right-numbered　Ω Other　　(1) Insert Reference　　○ Equations
Σ Open Math Input Panel　　　　　　　　　　　1.1 2.1 Chapters & Sections　　∓ Next

Insert Equations　　　　　　　　　Symbols　　Equation Numbers　　Browse

answers are:

$$x = \frac{-(-54) \pm \sqrt{(-54)^2 - 4(9)(80)}}{2(9)}$$

MathType - Equation in Docx with MathType Objects.docx

File　Edit　View　Format　Style　Size　Preferences　Help

Algebra　Derivs　Statistics　Matrices　Sets　Trig　Geometry　Tab 8　Tab 9

$\cos^{-1}\theta$　$\sin^{-1}\theta$　$\arcsin\theta$　$e^{i\theta}$　$\frac{\text{Opposite}}{\text{Hypotenuse}}$　$\left(\frac{\pi}{2}-\theta\right)$

θ　φ　$\frac{1}{2}$　$e^{i\theta}$　$\sqrt{2}$　π　$\frac{\pi}{2}$　$\frac{\pi}{3}$　$\frac{\pi}{4}$　$\frac{\pi}{6}$　$90°$　$60°$

$$x = \frac{-(-54) \pm \sqrt{(-54)^2 - 4(9)(80)}}{2(9)}$$

we got

Key Points

1. You will need to install the MathType Equation Editor from Design Science to support accessible math equations in MS Word documents. MathType is available for both the Mac and Windows platform.
2. With MathType installed, you can enter equations using the MathType Equation Editor or by adding LaTeX. If using LaTeX, you will need to convert all equations to MathType equations.
3. MathType should be used for equations and not for entering text information. Avoid using MathType for formatting purposes.
4. At this time, documents must be saved as DOCX in order to be converted into alternate formats using SensusAccess (e.g., DAISY+Math, EPUB 3, etc.).

5. We are investigating additional input formats, including LaTeX and MathML, to support conversions into alternate document formats. Thank you for your patience.