

# Reports using MS Word

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ChEn 1703

# Figures

## Inserting a figure:

- If saved on disk:  
Insert → Picture → From File
- If copied onto the clipboard,  
simply paste it.
- Drag & drop from another  
application...

## Creating a caption

- Select the figure, Insert → Caption
- Set label to “Figure”
- Type text for your caption in the  
text box & click “OK”

## Formatting

- Right-click & choose “Format  
Picture”
- Size - allows you to change  
figure’s size
  - ▶ “Lock Aspect Ratio” - prevents you  
from distorting figure...
- Layout - changes how text wraps  
around figure.
  - ▶ Click “Advanced” & select “Top and  
Bottom” to have no text wrapping.

**NOTE: MS Word doesn't handle figures too well. Occasionally, captions can detach. Try not to drag figures around the document once you place them...**

# Exporting MATLAB Figures



In the figure, choose  
File → Export setup

- Edit fonts, background, etc., or choose a predefined export style.
- Click “Export” and choose the file name and type (eps, tiff, jpg, gif, etc).

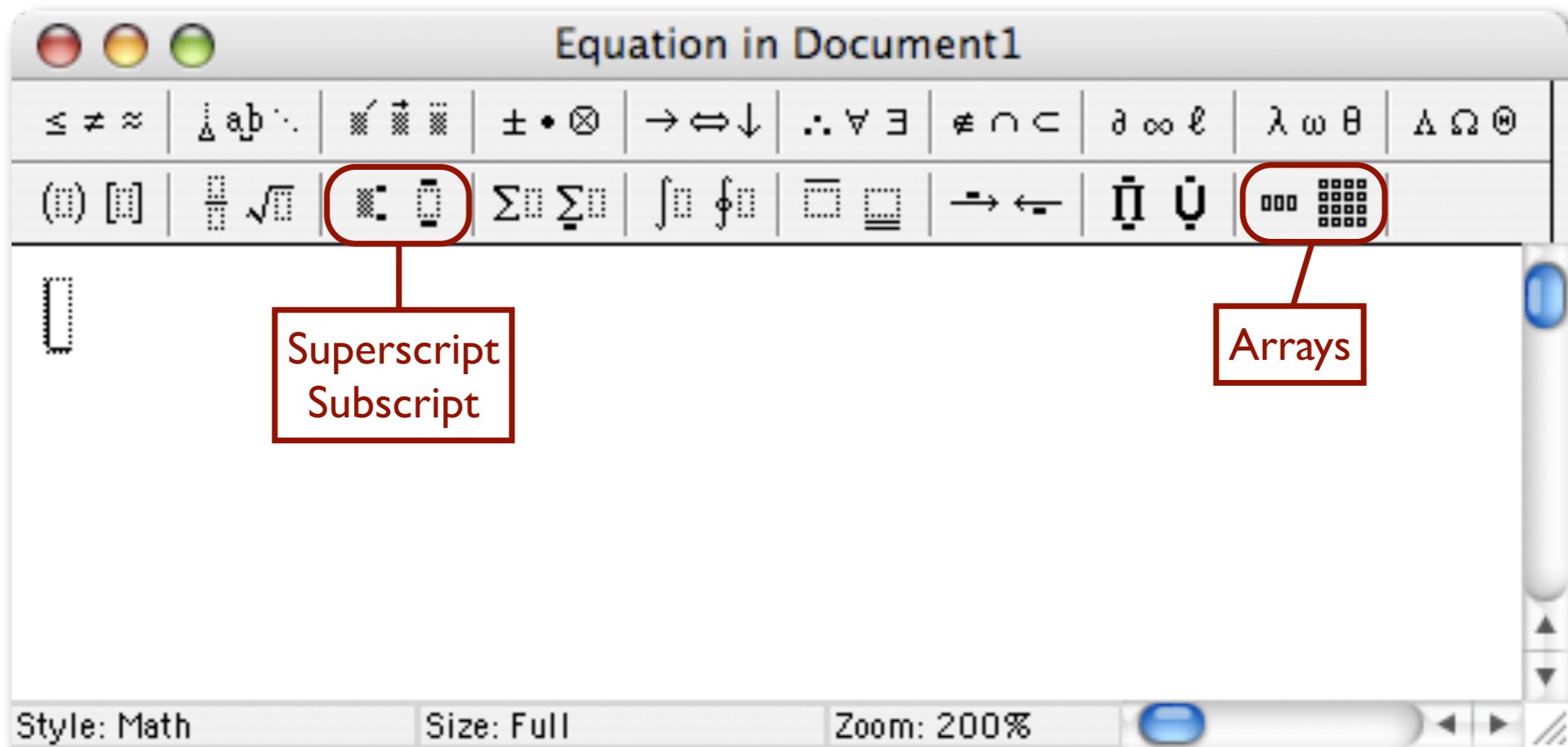


Copy & Paste the  
figure into MS word,  
Powerpoint, etc.

The image shows the 'Properties' dialog box in MATLAB, specifically the 'Fonts' tab. The dialog is divided into two main sections: 'Properties' and 'Export Styles'.  
**Properties Section:**  
- A sidebar on the left lists 'Size', 'Rendering', 'Fonts' (selected), and 'Lines'.  
- The main area has a checked box for 'Custom size:'.  
- Under 'Custom size', there are two radio buttons: 'Scale font by' (set to 'auto' with a percentage sign) and 'Use fixed font size' (set to '18' points).  
- Below these are three unchecked checkboxes: 'Custom name:' (set to 'Helvetica'), 'Custom weight:' (set to 'normal'), and 'Custom angle:' (set to 'normal').  
**Export Styles Section:**  
- 'Load settings from:' is set to 'default' with a 'Load' button.  
- 'Save as style named:' is set to 'default' with a 'Save' button.  
- 'Delete a style:' is set to 'James' with a 'Delete' button.  
**Buttons:**  
On the right side of the dialog, there are five buttons: 'Apply to Figure', 'Restore Figure', 'Export...', 'OK', and 'Cancel'. A 'Help' button is located at the bottom right.

# Equations

Insert → Object → Microsoft Equation



Close Equation Editor when you are done to insert the equation into MS Word.

# Numbering Equations




<http://support.microsoft.com/kb/212381/EN-US/>  
or see the class [wiki page](#)

1. On a new line, insert a **tab**, then insert the **equation**, then insert another **tab**.
2. Choose **Insert**→**Caption**, and select “**Equation**” as the label type.
3. Click the “**New Label**” button and enter “(” and click “**OK.**”
4. Enter a “)” after the caption and push enter.
5. Select the entire line of text & choose **Table**→**Convert**→**Convert Text to Table**.
6. Choose **3** columns & click “**OK.**”
7. Choose **Format**→**Borders and Shading** and click the “**none**” box.
8. Right-click on the cell containing the formula and choose **Cell Alignment**→**Align Center**.
9. Right-click on the cell containing the label and choose **Cell Alignment**→**Align Center Right**.

**NOTE:** Modify step 6 (2 columns) and 8 (align left) if your equation should be aligned left.

# Cross-References

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-  Insert → Cross Reference
-  Choose type of cross reference (figure, equation, table, etc.).
  - Note that for equation references, you should select “(“ as the type of cross reference (see slide on numbering equations).
  - Pay attention to the drop-down box entitled “Insert caption reference to:”
    - ▶ On figures, only insert the label & number, e.g. “Figure 2”
    - ▶ On equations (see slide on numbering equations), use “Entire caption”
-  If references are “out of date” then select the whole document, right-click and choose “Update Field”

# Citations / Bibliography



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- At the end of your document, start a new section entitled “References”
- Begin a numbered list
- Add each reference as a new item in the list
- Refer to references using Insert → Cross Reference
  - Note that inserting a reference in the beginning of the list can break the cross-referencing to the first item...
  - Adding references in the middle or at the end works fine.

**NOTE: As with equations, no elegant solution exists in Word 2003.**

# Alternatives...

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-  LaTeX - a very powerful typesetting language.
  - <http://www.latex-project.org/>
  - VERY good at equations, placing figures, and doing cross-references.
  - Used extensively in the math, science & engineering fields for technical reports & papers.
  - Produces PDF documents
  - Not GUI-based WYSIWYG.
  - Available on all platforms (Windows, Mac, Linux, Unix).
-  Lyx - GUI front-end for LaTeX. Very good for “beginners” and experts alike.
  - [www.lyx.org](http://www.lyx.org)
  - Available for Windows, Mac, Unix, Linux.