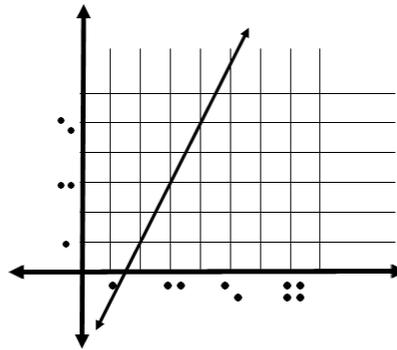


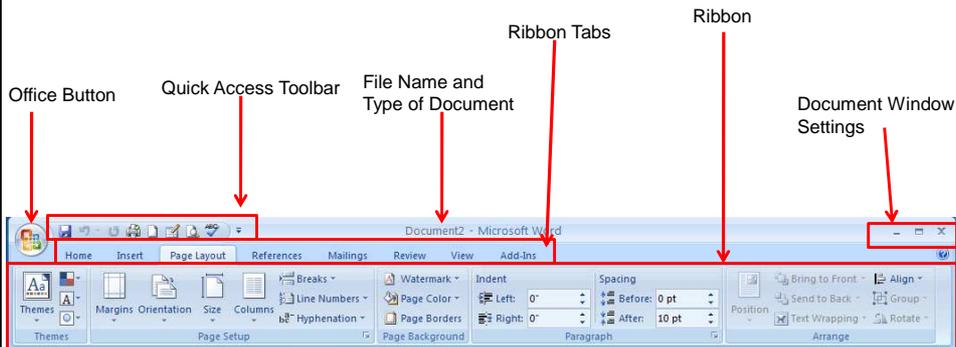
Using Computer Drawing Tools to Produce Tactile Graphics

Microsoft Word 2007

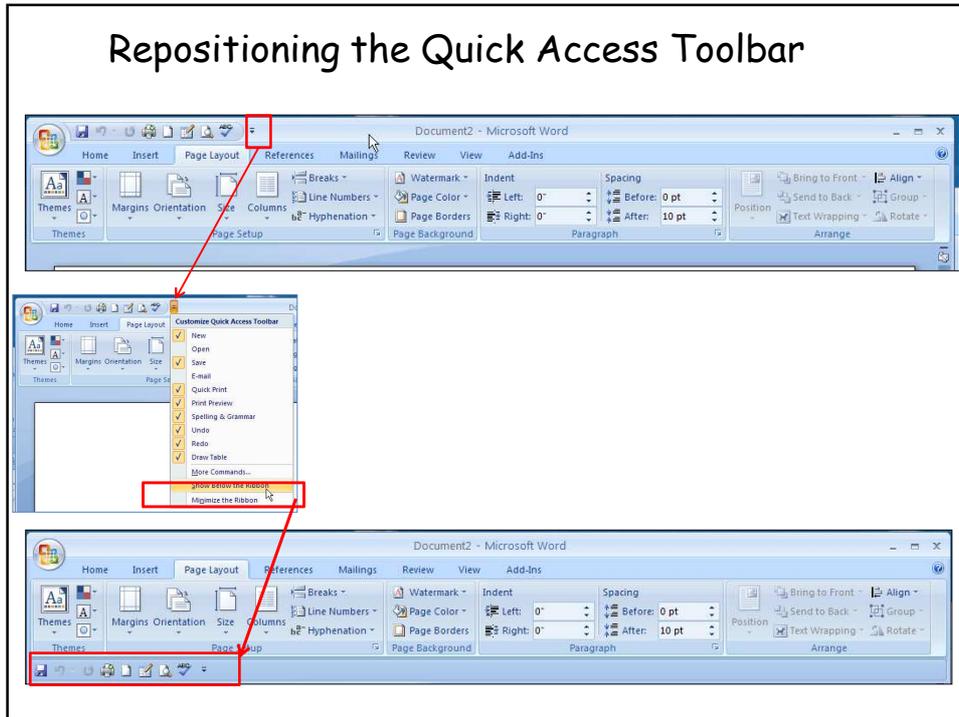


Patrick Van Geem, TVI
Outreach Department
TSBVI

The Ribbon Menu of Microsoft Office Applications



Repositioning the Quick Access Toolbar



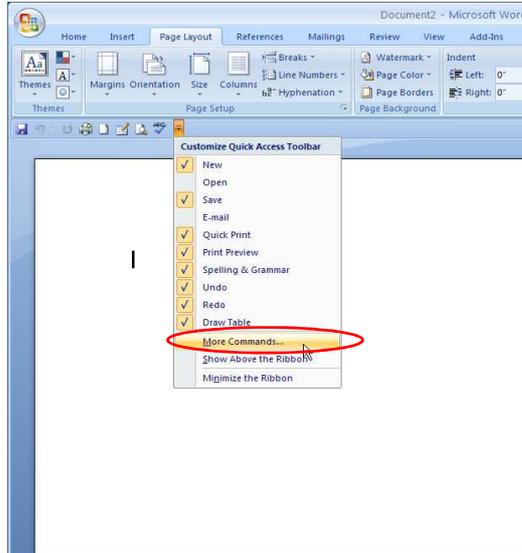
Drawing Tools for the Quick Access Toolbar



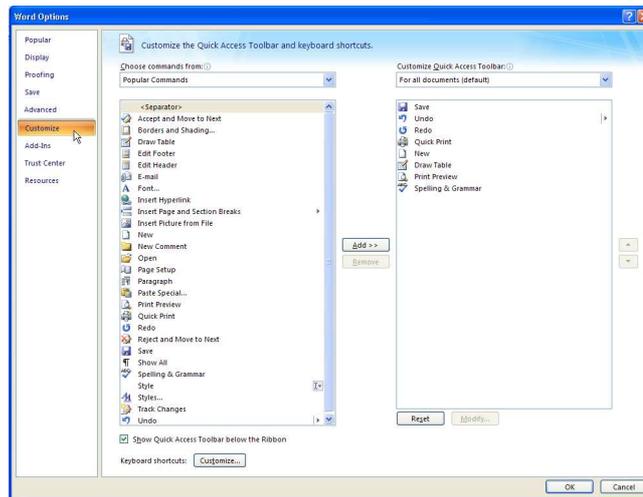
- Grid Settings
- View Gridlines
- Shapes
- Ungroup
- Group
- Dashes
- More Lines
- Arrows
- More Arrows
- Outline Weight
- Draw Text Box
- Shape Fill
- Shape Outline
- Rotate
- Send to Back
- Bring Forward
- Bring to Front

Adding Tool Quick Access Toolbar Menu

- Select the launcher arrow to the right of the Quick Access Toolbar
- Select “More Commands...”



Quick Access Tool Bar Tool Selections



The “More Commands” selection will activate the Word Option dialog box.

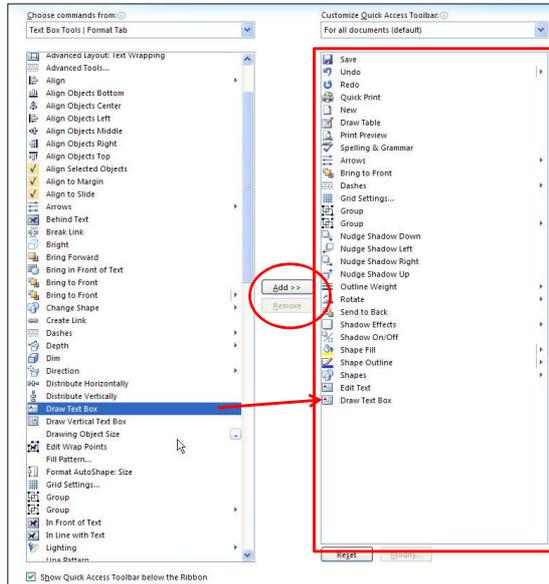
Selecting The Drawing Tools List

- Select the customize selection in the Word Option listing.
- Select “Drawing Tools...” in the commands listing.
- The Drawing Tools listing is activated.

Categories of Tools Menu

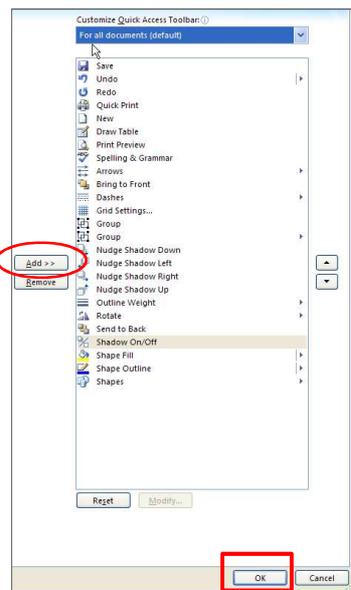
- Tools are categorized in groups.
- The “Drawing Tools” category contain the Word drawing tools.
- Text boxes are located in the “Text Box Tools”

Uploading Tools on to the Quick Access Toolbar



- Press “Add” to upload a selection from the left side tool list.
- All tool you want uploaded on the Quick Access Toolbar should be listed in this right side listing.

Tools on Quick Access Toolbar



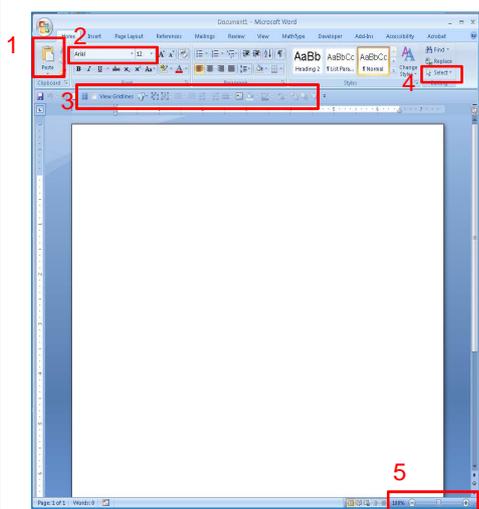
- Tools added to the Quick Access Toolbar will appear in this right side tool listing.
- Be sure to press “OK” after uploading is complete.
- Tools in this list will now appear in the Quick Access Toolbar on the Ribbon.

Things to Know About *Graphic Design*

- “Zoom” tool
- “Group” (mending objects together)
- Grid Line Display
- “Undo” keystroke (Ctrl+z)
- Duplicate keystroke (Ctrl+d)
- Copy keystroke (Ctrl+c)
- Paste keystroke (Ctrl+v)
- Cut keystroke (Ctrl+x)
- Drawing Area (only in MS Word)
- Order (arranging object from front to back)

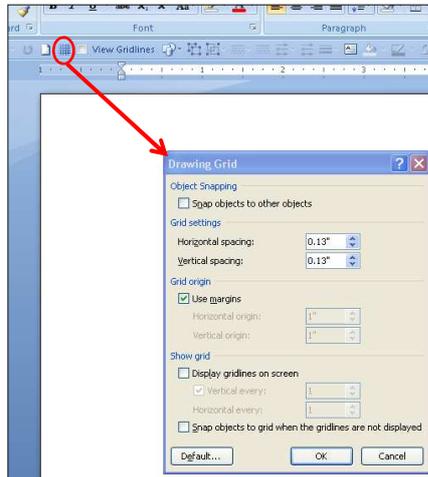
11

Location of Tools for Production



1. Paste and Paste Special
2. Font Type and Size
3. Drawing Tools on the Quick Access Toolbar
4. Object Select Arrow
5. Zoom

Opening the Drawing Grid



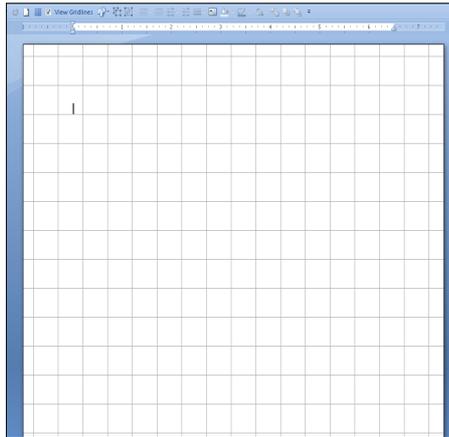
- Select the “Grid Setting” tool in the Quick Access Toolbar.
- A “Drawing Grid” dialog window is activated.

Configuring the Drawing Grid



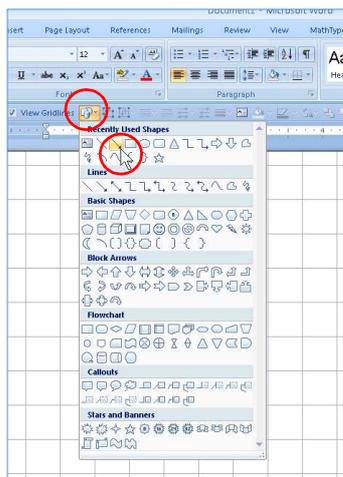
1. Uncheck “Snap objects to.....”
2. Set Grid setting to 0.5” on both spacing's
3. Uncheck “Use margins”and set margins to about 0.2”
4. Check “Display gridlines on.....”
5. Set Vertical and Horizontal every set to 1
6. Press OK

Grid Guidelines Work Space



The grid guidelines will not print out on the final document.

Selecting a Tool (Arrow Line)



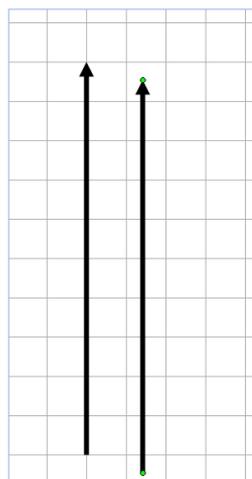
- In the Quick Access Toolbar select the “Shapes” icon.
- Select the arrow line tool icon.

Drawing An Arrow Line



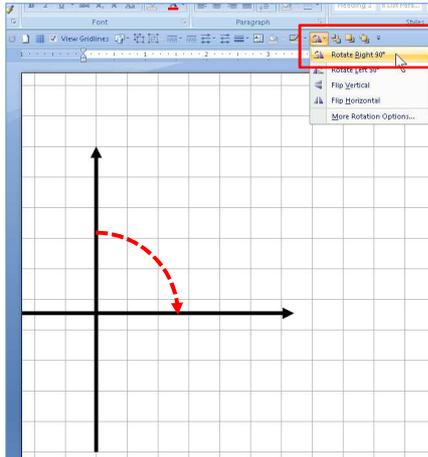
- Place the Drawing cursor at a guideline intersection (1).
- Hold the left mouse button down.
- Drag mouse cursor moving from bottom to top (2).
- Release at the preferred end point.

Duplicating An Object



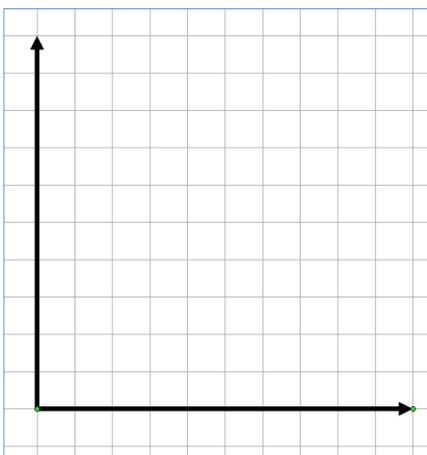
- Select the original object.
- Press the key combination command Ctrl+D to duplicate the arrow.

Rotating An Object



- Make sure the object is highlighted (selected).
- Select the “Rotate” icon in the Quick Access Toolbar.
- Select “Rotate Right 90 degrees”

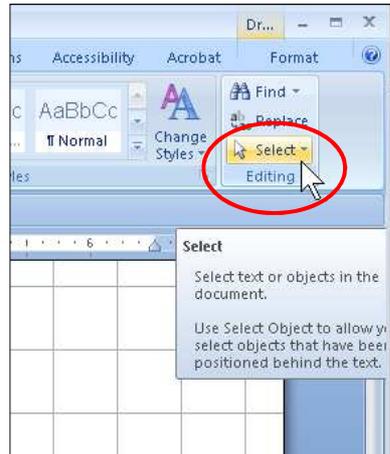
Moving An Object



Objects are moved in two possible ways.

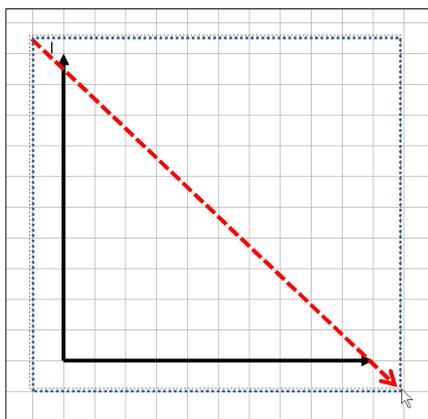
1. Mouse (left button and dragging).
2. Keys (directional arrow keys).

Using The Object Select Arrow



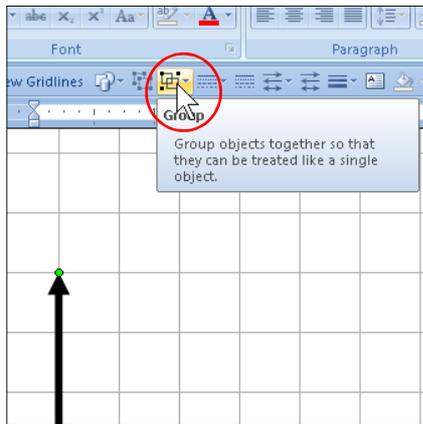
- On the Home tab on the Ribbon go to the Editing section.
- Select the “Select Arrow” icon.
- This turns the cursor into a “select object” cursor.

Selecting More Than One Object



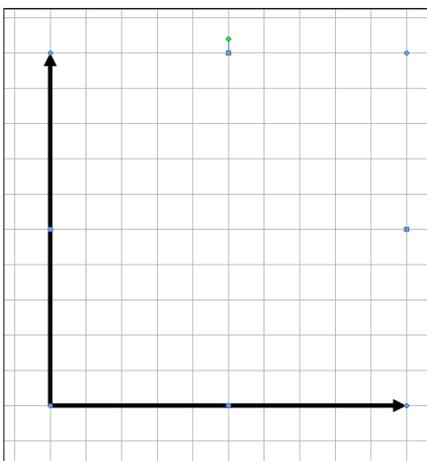
- Place the Select arrow cursor above all objects included in the selection.
- Hold the left mouse button down.
- Drag across all objects that you want selected.
- The selection marquee (dashed lined rectangle) should include all objects in the selection.

Grouping Selected Objects



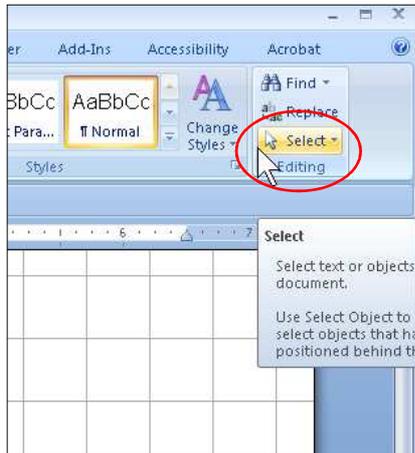
- Choose the “Group” icon located in the Quick Access Toolbar.
- Clicking on this icon will mend the objects included in the selection marquee into one object.

Mended Object



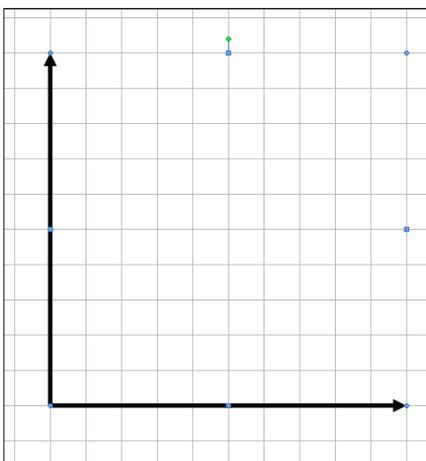
- Now the objects mended together becomes one object.
- It can now be moved as one object by the arrow keys or by the mouse.

Selecting the Mended Object



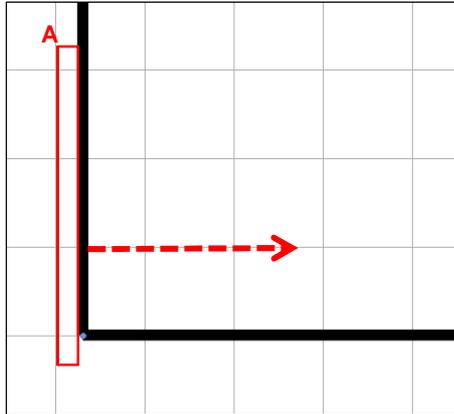
- Select the “Select Arrow” in the Editing section of the Home tab.
- Position the cursor over the mended object.
- With the left mouse button press it to select the object.

Object Selected (Highlighted)



- The blue dots indicates that object is selection.
- Selection of object can only occur when the cursor is changed to the “Select Arrow” cursor.

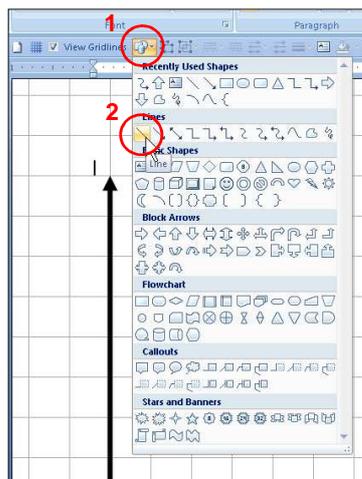
Nudging A Selected Object



- Hold down the Control key.
- With the Control key pressed nudge the object right with the right arrow key.

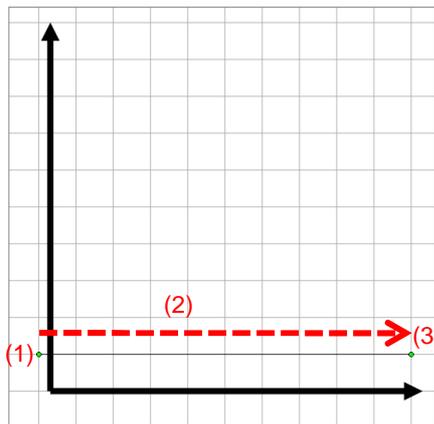
The space created (A) is the starting point for each coordinate line of the graph.

Selecting the Drawing Line Tool



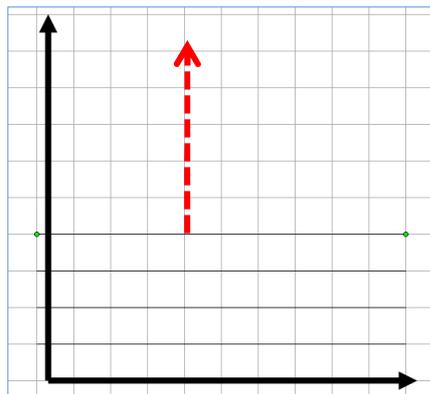
1. Select the “Shapes” icon in the Quick Access Toolbar.
2. Select the “Line” icon in the Lines category.
3. The arrow cursor changes into a crosshair drawing cursor.

Drawing Lines



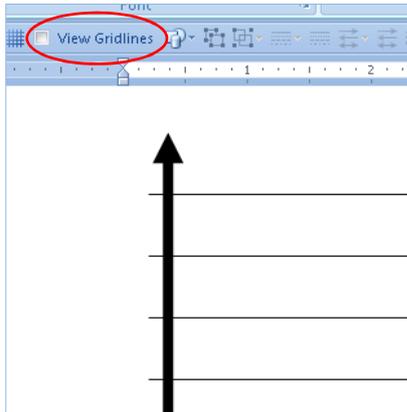
- Place the drawing cursor on a guideline intersection just to the left of the vertical (y-axis) arrow line (1).
- Press and hold down the left mouse button.
- Drag the mouse from left to right (2).
- Release the left mouse button at the preferred end point (3).

Duplicating Objects



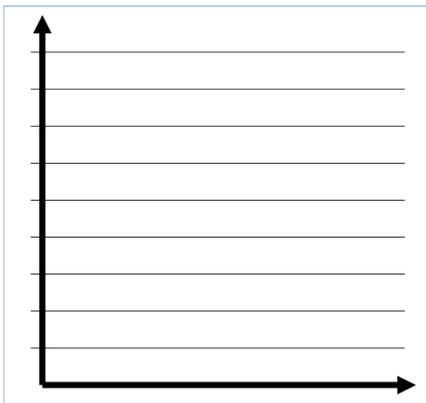
- Press the key combination command: Ctrl+D to duplicate.
- Duplicate once then nudge object into the appropriate position.
- Further duplication will produce objects into place automatically (not always accurate).

Hiding the Grid Guidelines



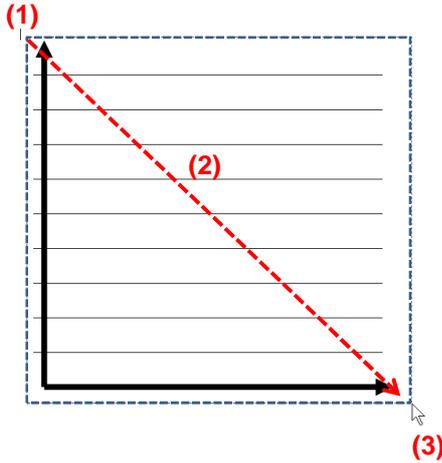
Uncheck “View Gridline” to hide the grid guidelines.

Objects without the Grid Guidelines



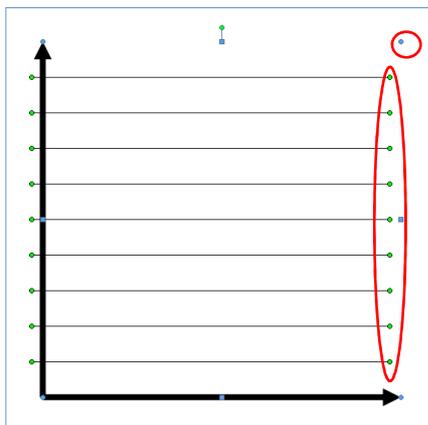
- The object(s) can clearly be examined without the guidelines.
- This is visually easier when needing to select and group objects.

Selecting All Objects for Grouping



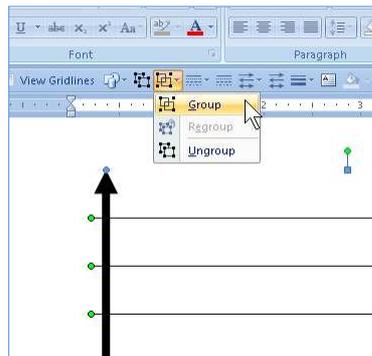
1. Choose the Select Arrow in the "Editing" section in the "Home" tab on the Ribbon menu.
2. Place the Select Arrow just above and to the left of all objects need to be selected (1).
3. Press and hold down the left mouse button.
4. Drag mouse cursor (Select Arrow) diagonally down to the right lower corner (2).
5. Be sure to include all object within the selection marquee (3).

All Objects Selected



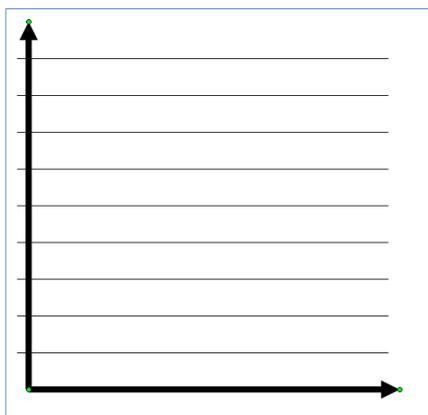
- Releasing the mouse button will reveal all objects included in the selection.
- The green dots or blue square markers indicate that objects have been selected.

Grouping



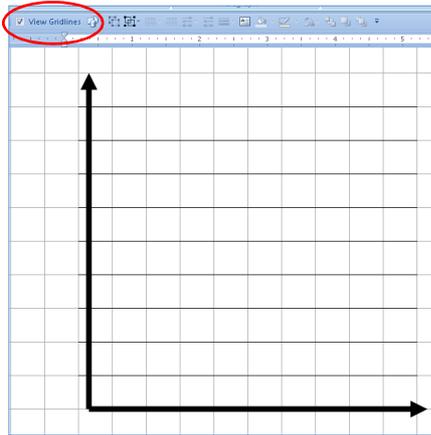
- Select the “Group” icon on the Quick Access toolbar.
- Select “Group” from the menu.
- Objects are mended together as one object.

Mended Object



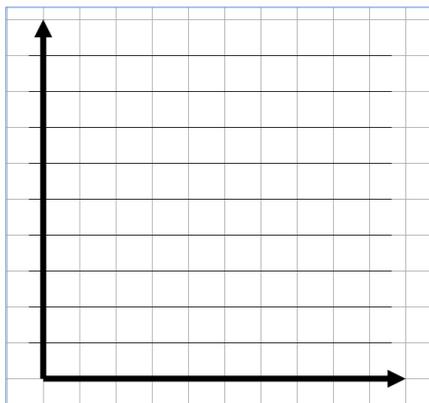
- The objects mended together now is one object.
- It can move in the document as one object.

Revealing the Grid Guidelines



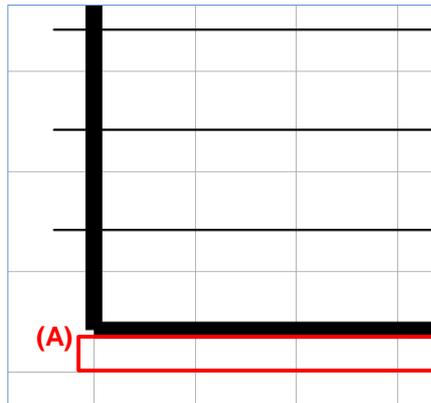
- Check the “View Gridlines” to reveal the grid guidelines.
- Object will snap to the gridlines.

Repositioning the Object



- Nudge the object back to the grid guidelines by using the arrow keys.
- Coordinate lines and axis lines are now realigned to the grid guidelines.

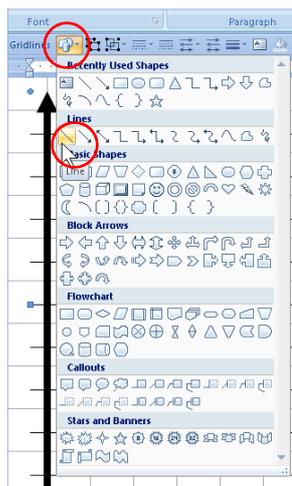
Nudging the Object



- By pressing the key combination command: **Ctrl + Up Arrow**, nudge the object to reveal a space between the horizontal arrow line and a grid guideline.

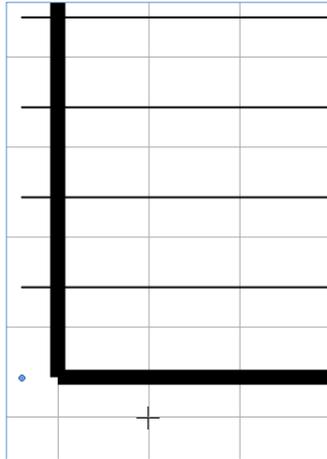
The space created (A) is the starting point for each coordinate line of the graph.

Selecting the Line Drawing Tool



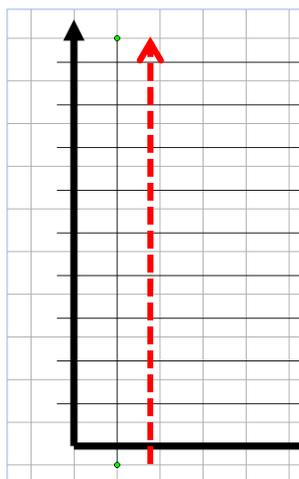
- Select the “Shapes” icon on the Quick Access Toolbar.
- Select “Line” in the “Lines” category.
- The arrow cursor will change into a drawing crosshair cursor.

Position the Drawing Cursor



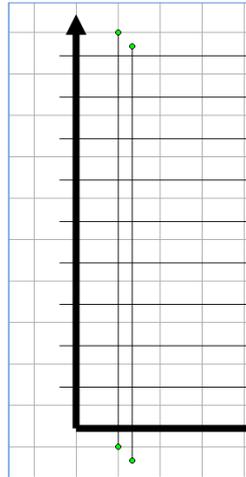
Set the cursor on an intersection of grid guidelines below the x axis line.

Drawing A Line



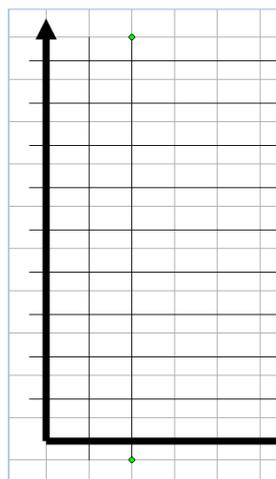
- Press and hold the shift key down.
- Press and hold the left mouse button down.
- Drag the mouse from bottom to top to draw a line.

Duplicating A Line



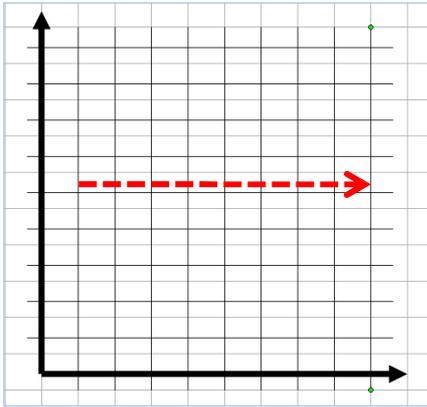
- Select an object to be duplicated.
- Press the key combination command: Ctrl + D to duplicate an object that has been selected

Snapping an Object to the Grid Guidelines



- Be sure that the object for repositioning is selected.
- Use the arrow keys to reposition a selected object to snap it to the grid guidelines.

Repeat Duplication

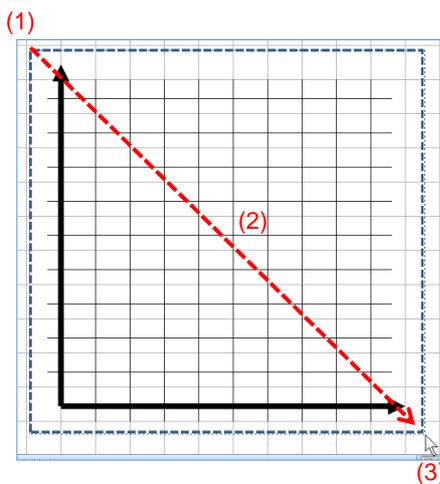


Repeat pressing Ctrl +D to continue duplicating the object.

Once the first duplicated object is trained to the grid line, repeat duplication of the object will try to “guess” the next position.

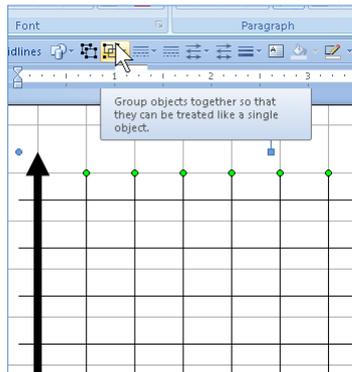
Sometimes its guess is correct.

Selecting All Objects



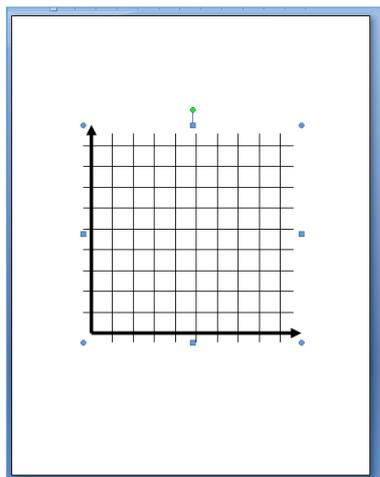
1. Choose the Select Arrow in the “Editing” section in the “Home” tab on the Ribbon menu.
2. Place the Select Arrow just above and to the left of all objects need to be selected (1).
3. Press and hold down the left mouse button.
4. Drag mouse cursor (Select Arrow) diagonally down to the right lower corner (2).
5. Be sure to include all object within the selection marquee (3).

Grouping



- Select the “Group” icon on the Quick Access toolbar.
- Select “Group” from the menu.
- Objects are mended together as one object.

Completed Object



- Objects are now one object (Cartesian coordinate plane).
- It can be moved to any area of the document easily as one object.

Labeling the Tactile Graphic

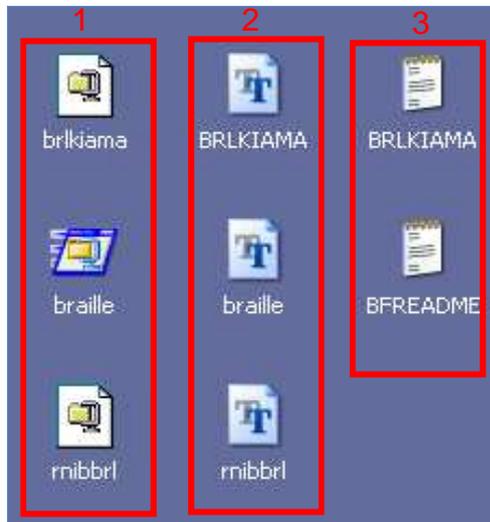
- Use the BANA standards as much as possible.
- Do not clutter with too many graphics.
- Titles are always above graphics.
- Legends need to be on separate pages.
- Use only graphics and labels that best represent the answers to questions.

Direct Input Translation

- Text is typed in using computer Braille or ASCII for contracted Braille characters.
- Doing it this way does not require extra software.
- Braille fonts need to be uploaded on your computer.

Getting Braille Fonts

www.tsbvi.edu/Education/fonts.html



1. Zip files downloaded from TSBVI website
2. File extracted from the zip file
3. Text information about files when extracted from the zip file

Where to Upload Braille Fonts

1. Open "My Computer"



- Open the "Start" menu.
- Select "My Computer"

Where to Upload Braille Fonts

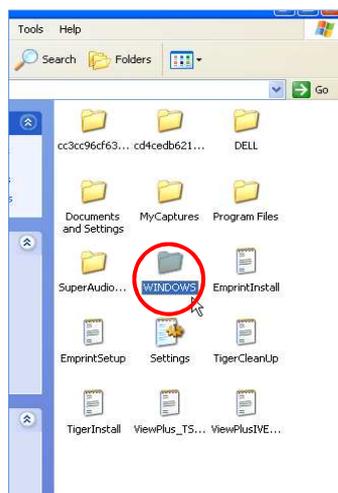
2. Open "Local Disk (C:)"



- Locate in the "Hard Disk Drives"
- Double click to open or select icon and press "Enter"

Where to Upload Braille Fonts

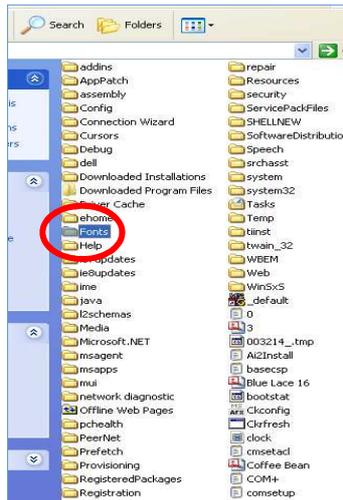
3. Open "Windows" folder



- Locate the "Windows" folder
- Open by double clicking on it or select and press "Enter"

Where to Upload Braille Fonts

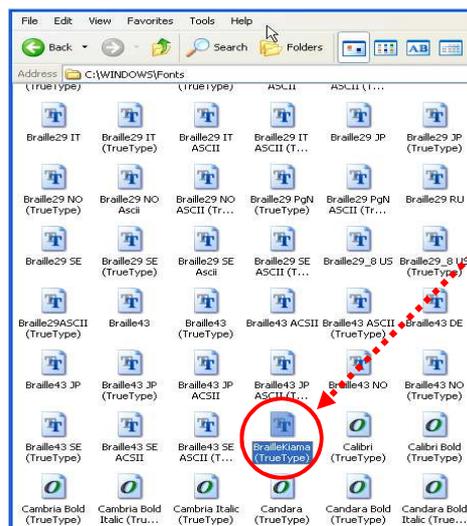
4. Open "Fonts" folder



- Locate the "Fonts" folder
- Open by double clicking or select it and press "Enter"

Where to Upload Braille Fonts

5. Drag and Drop in "Fonts" folder



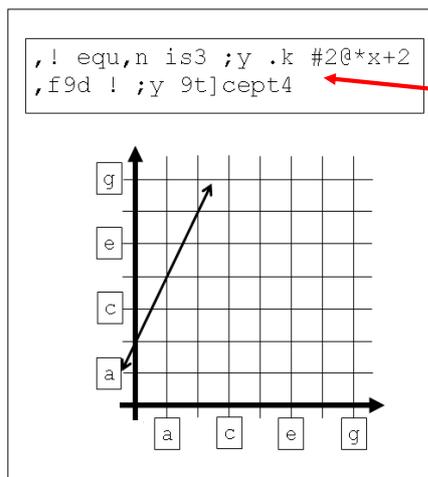
- Folder will open up to many font files.
- Drag and drop Braille files in this folder.
- Close the folder.

Labeling: ASCII Input

Braille ASCII	
⠠ ~	⠠ = = for
⠠ ! the	⠠ , capital
⠠ `	⠠ < gh
⠠ @	⠠ . decimal
⠠ # able	⠠ > ar
⠠ \$ ed	⠠ / st
⠠ % sh	⠠ ? th
⠠ ^	⠠ \ ou
⠠ & and	⠠ ; be
⠠ * ch	⠠ : wh
⠠ (of	⠠ " comma
⠠) with	⠠ .
⠠ _	⠠ [ow
⠠ - con	⠠] er
⠠ + ing	

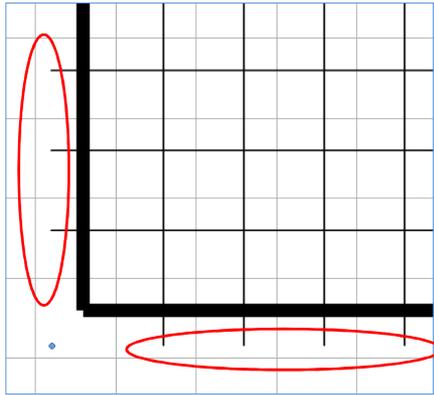
- A character represents a contracted Braille symbol.
- Computer Braille.
- No translation is needed.
- Commonly used by Braille production specialist.

Textbox Translated Into ASCII



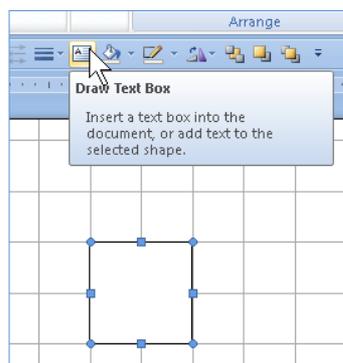
- Text written in ASCII includes contracted Braille characters.
- A Braille font uploaded in Word will translate this document in contracted Braille.

Repositioning The Graphic



- Select the graphic.
- Nudge the graphic off the grid guidelines by pressing the key combination command: Ctrl+ Arrow Key(s).
- The tick lines should have a space between them and the nearest grid guidelines

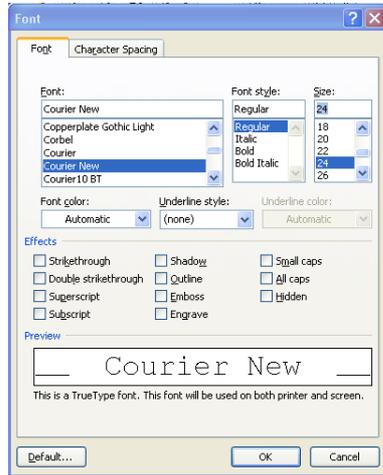
Creating A Text Box



- Select the “Draw Text Box” icon on the Quick Access Toolbar.
- Move the cursor anywhere on the document.
- Press down the left mouse button.
- A text box will appear with a blinking cursor.

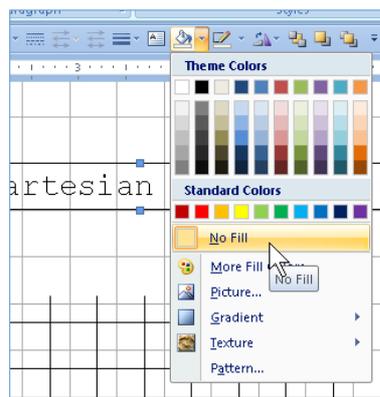
Font Setting

(If not using Braille direct input)



- Courier New
- Regular style
- 24point (for encapsulated paper production)
- 28 point (for Tiger embossing)

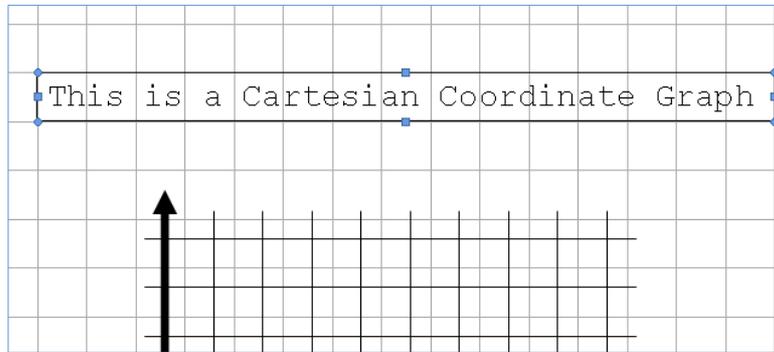
No Fill Text Box



- Be sure the textbox is selected (highlighted).
- Select the “Shape Fill” icon in the Quick Access Toolbar.
- Select “Now Fill.

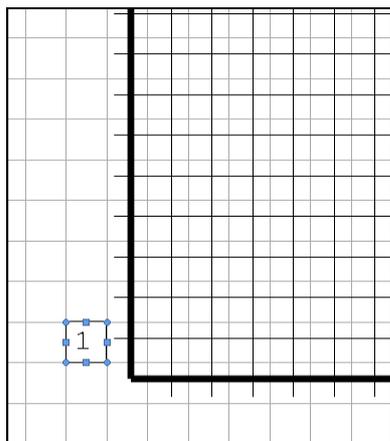
Text Boxes

(Transparent -No Fill Background)



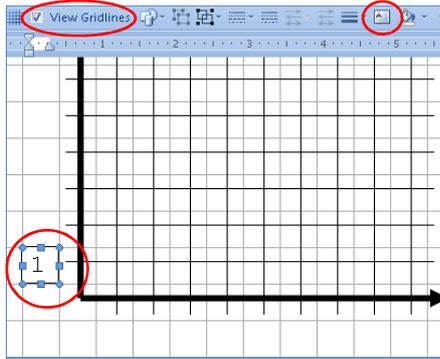
The textbox becomes transparent within the document.
Any object or grid guideline is visible behind the textbox.

Methods for Labeling the Graphics



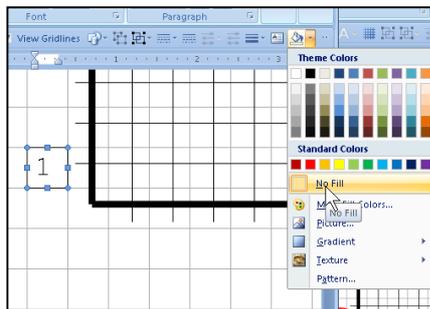
- Math Graphs
- Charts
- Maps
- Scientific Graphics

Adding Graphics Labels



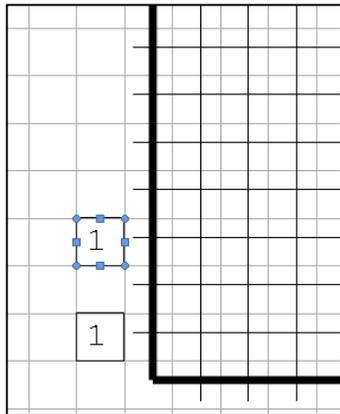
- Check “View Gridlines”
- Position graphic in the preferred location.
- Select the “Text Box” icon.
- Press the left mouse button down when the cursor on the document.
- Nudge in position using the arrow keys.

Fill Setting for Graphic Labels



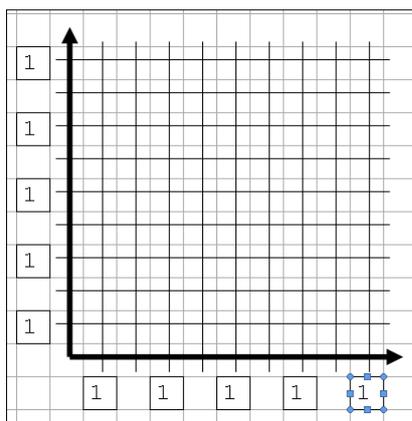
- Select the text box label (highlight text box)
- Select “Fill Shapes” pull down arrow (to the right of the Fill icon),
- Select “No Fill”

Duplicating Text Boxes



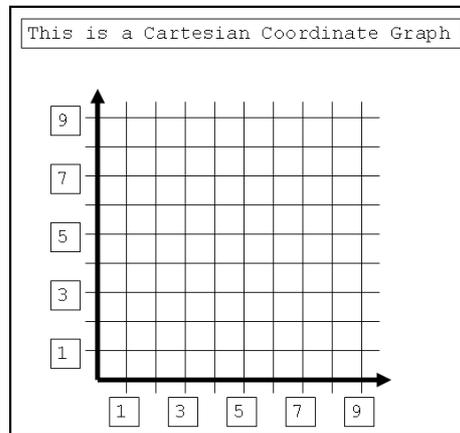
- Make sure “View Gridline” is activated.
- Select the text box label
- Press Ctrl + D to duplicate the text box
- Nudge in position by using the arrow keys.

Repeat Duplication



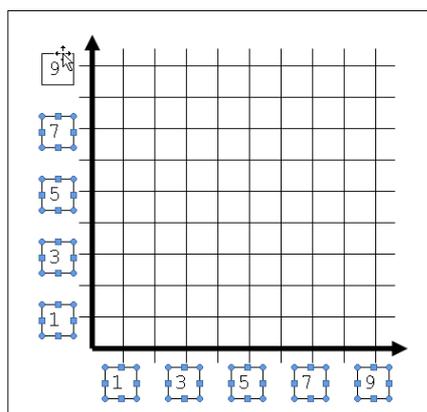
- Nudging a duplicated text box into a preferred position will train Word to predict the next preferred location.
- If prediction is correct then keep pressing Ctrl + D until labeling is complete.

Fine Tuning Graphic



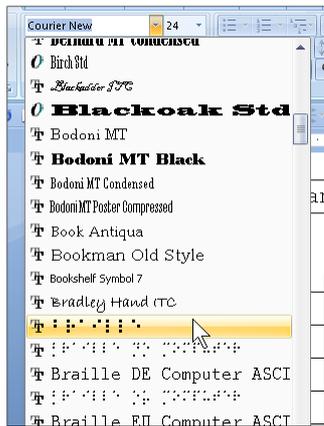
- Correct all labels.
- Check spelling and grammar is correct.

Selecting all Text Boxes



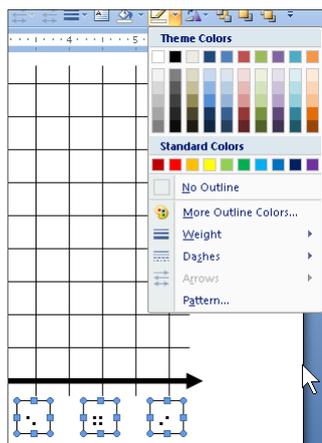
- Hold down the “Shift” key.
- Click on each text box label
- Text boxes will stay selected

Selecting A Braille Font



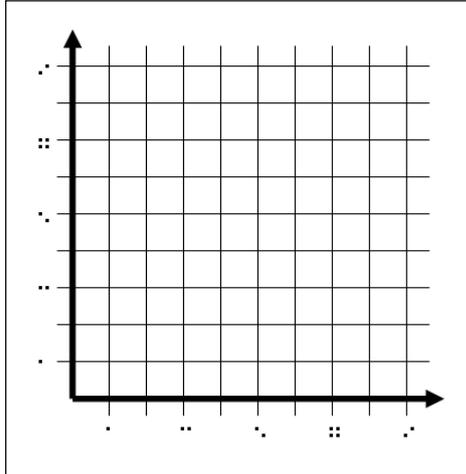
- Select the pull down arrow to the right of the font type field in the Ribbon menu bar.
- Select a Braille font.
- Make sure it is at least 24 point size.

No Fill Background In Text Boxes



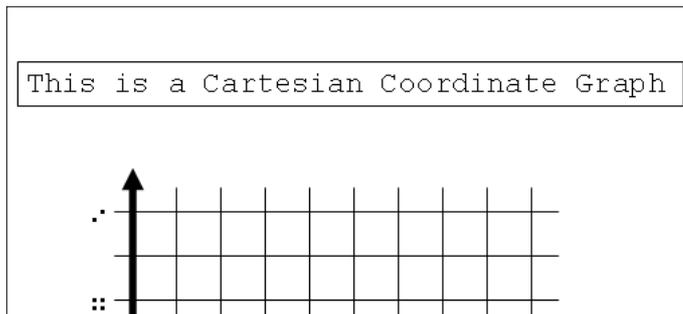
- Select the pull down arrow just to the right of the "Shape Outline" icon.

Ready Labels



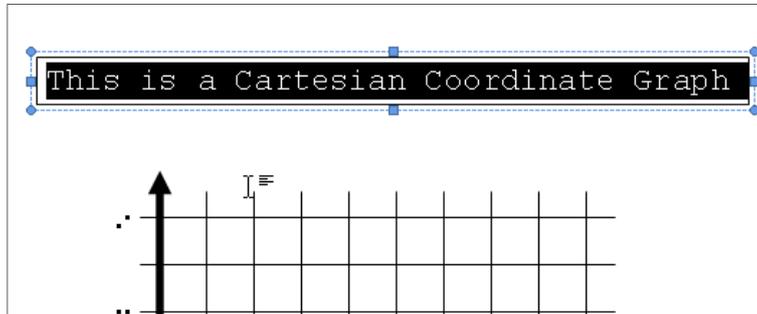
- Text box borders removed.
- Fills are set at “No Fills”
- Font size is at 24 point.
- Type font: Braille or Braille Kiama

Labels Involving Contracted Braille



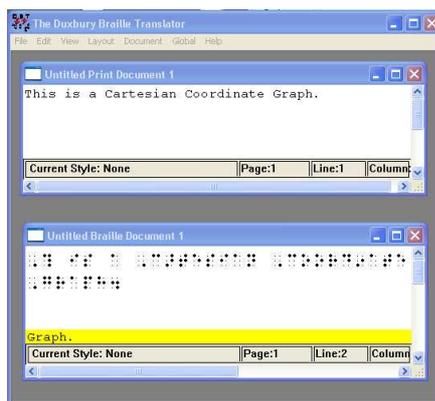
- Text can be entered in directly by using ASCII text
- Text can be entered in by cutting, translating and pasting using either Duxbury or Braille 2000.

Selecting and Copying Text in Text Box



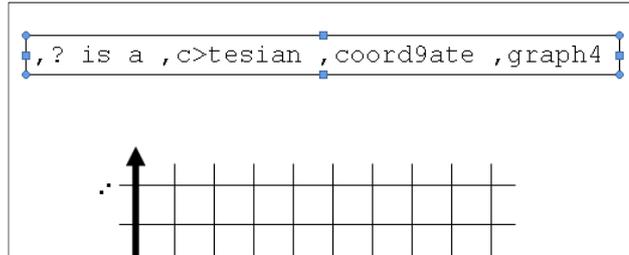
- Select the text in the text box.
- Copy text to clipboard: Ctrl + C.
- Open a blank “print” document in Duxbury or Braille 2000.

Pasting, Translating and Copying from Braille Translation Software



- Paste into a “Print” new document in Duxbury or Braille 2000.
- Translate the document into Braille (contracted).
- Select the translated Braille document.
- Copy to clipboard (Ctrl +C)

Pasting New Text into Text Box



- Make sure the original text in text box is selected.
- Replace the old text with the translated text by pasting from clipboard: Ctrl + P.
- New text will appear in ASCII or computer Braille.
- Text can now be changed to a Braille font.



T S B V I

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