Arts & Letters Draw
Step-by-Step Tutorials

About these Tutorials

Tutorial List

About Your Mouse

Tutorial List

1 Selecting and Placing Objects

2 Manipulating Objects and Adding Text

3 Manipulating Text

4 Freeform Drawing

5 Using Style Bundles

How To Use the Draw Step-by-Step Tutorials

Each Step-by-Step tutorial provides easy-to-read instructions that guide you through your first art projects in Draw one step at a time. Each new lesson reviews the last. The goal of these tutorials is to teach users of Draw basic techniques and resourceful ways of using the product.

Click on this icon at the bottom right to move to the next tutorial page.

Contents Button

Contents

Jumping to the Table of Contents

The Contents button always takes you back to the table of contents. You can reach this "home base" for the tutorials at any time. If you go to a different content menu, click on the owl to return to the tutorials.

Back Button

Back

Back up to the last topic viewed

Back retrieves your last topic if you go to an unintended destination.

Browse Buttons

-Page +Page

Turning the Tutorial Pages: Method 1

The browse buttons take you to the next or previous page in the author's sequence.

Page Up and Page Down

Turning the Tutorial Pages: Method 2

You can use the page up and page down keys on your keyboard to go to the next or previous pages in a tutorial.

Fold and Unfold

Fold Unfold

Making Room to Work

Doing the exercises in the Step-by-Step Tutorials requires using Draw. Since the tutorials window covers nearly half of the Draw work area, you will need to move it out of the way. After reading the steps and viewing the illustrations, click on the button labeled Fold. This "folds" the tutorial window up and out of the way. When its time to continue reading the steps, click on Unfold to restore the tutorial window to its original size.

If another tutorial window remains in the way, double-click on its upper left corner to remove it.

Review and Preview Buttons

Review Preview

Where You've Been

Where You're Going

The button labeled Preview displays an image of what your art should look like. The Review button will display a representation of what you created in the previous tutorial. This buttons are disabled or "gray" when there is nothing to preview or review. Watch for the + button in the text to display an illustration for the step immediately below it.

Bookmark Define + Click here to see dialog box.

The Bookmark menu allows you to insert a bookmark on any page that you would like to review later. Simply pull down the Bookmark menu and select define. In the Bookmark Define dialog type the name of the bookmark and press enter. Pull down the Bookmark menu again to see your bookmark listed as a

menu item.

Annotate **Click here to see dialog box.**

Another useful tool is Annotate. Place an annotation by pulling down Help's Edit menu and clicking on Annotate.... After you type and save your remarks, a green paper clip icon will be placed in the upper left of that topic. Later, even in a future session, you can click on the paper clip to retrieve your notes.

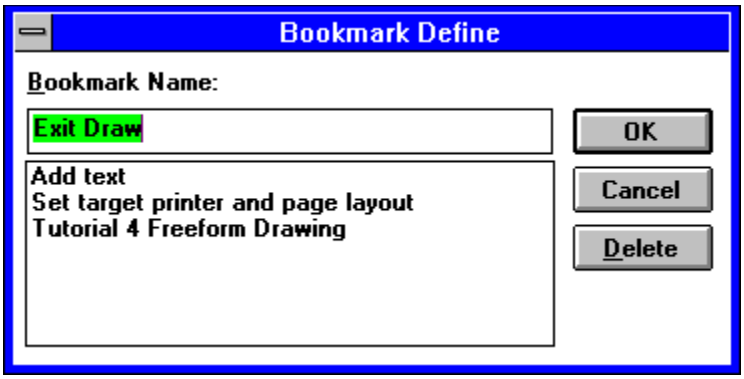
Tutorials Menu **Click here to see menu.**

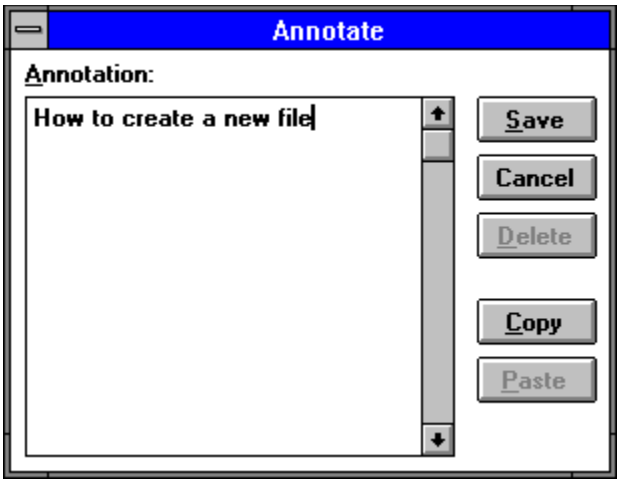
The Tutorials Menu allows you to access any tutorial. Simply pull down the Tutorials menu from the Draw Step-by-Step Tutorials window and click on the desired tutorial.

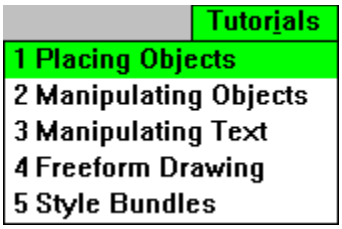
About Your Mouse

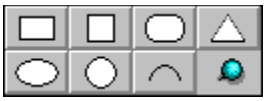
Both Draw and its on-line Help and Tutorials use the mouse in the following ways:

- The buttons of your mouse are referred to as primary (or inside) and content menu (or outside). The primary mouse button is nearest your pointer finger. When you are asked to click on something and no button is specified, use the primary mouse button.
- Know how to drag with the primary mouse button.
- The same primary mouse dragging motion displays the flyouts in the toolbox.
- Content menus display after selecting an object and holding down the content menu button. A click of this button selects the default item on the menu. In Draw Help, the content menu button serves to print or copy the topic you are viewing.

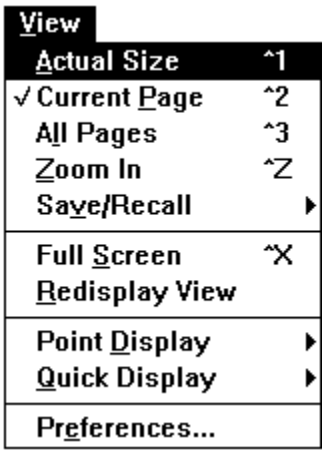

Bookmark Define
Bookmark Name:
Exit Draw
Add text
Set target printer and page layout
Tutorial 4 Freeform Drawing
OK
Cancel
Delete


Annotate
Annotation:
How to create a new file
Save
Cancel
Delete
Copy
Paste

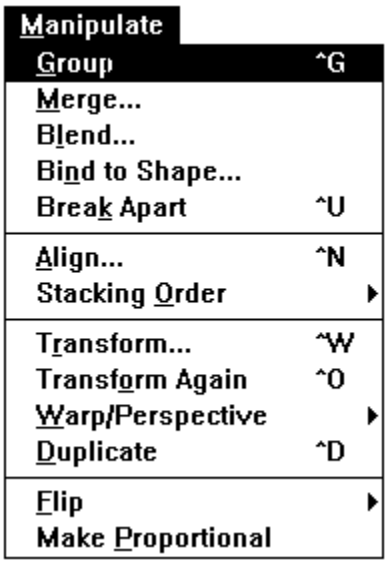

Tutorials
1 Placing Objects
2 Manipulating Objects
3 Manipulating Text
4 Freeform Drawing
5 Style Bundles

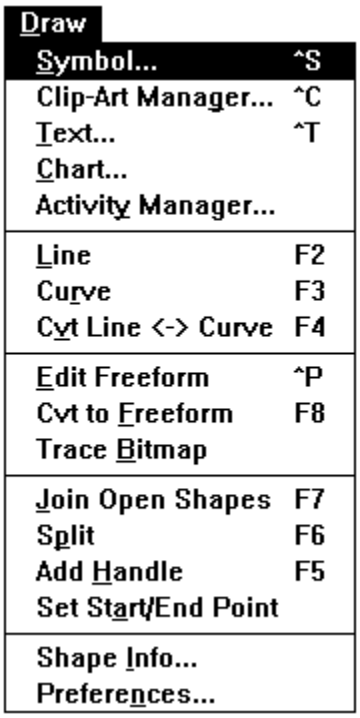


File
New
Open...
Save As...
Save F9
Page Setup...
Printer Setup...
Print...
Import...
Export...
Exit

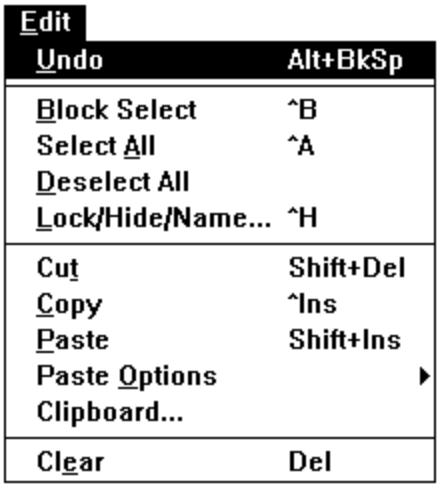

View
Actual Size ^1
✓ Current Page ^2
All Pages ^3
Zoom In ^Z
Save/Recall
Full Screen ^X
Redisplay View
Point Display
Quick Display
Preferences...

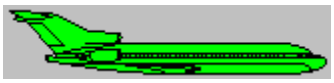
Beg Fill
End Fill
Line
Fill & Line

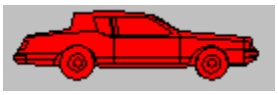

Manipulate
Group ^G
Merge...
Blend...
Bind to Shape...
Break Apart ^U
Align... ^N
Stacking Order
Transform... ^W
Transform Again ^O
Warp/Perspective
Duplicate ^D
Flip
Make Proportional

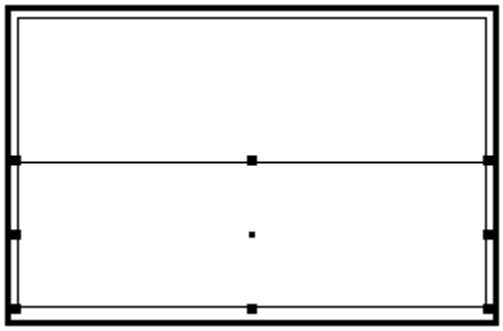

Draw
Symbol... ^S
Clip-Art Manager... ^C
Text... ^T
Chart...
Activity Manager...
Line F2
Curve F3
Cvt Line <-> Curve F4
Edit Freeform ^P
Cvt to Freeform F8
Trace Bitmap
Join Open Shapes F7
Split F6
Add Handle F5
Set Start/End Point
Shape Info...
Preferences...

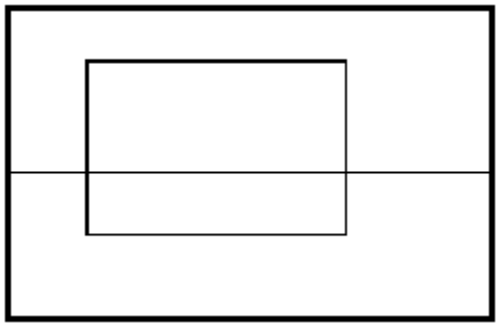
The Add Object cursor is used to add text, symbols, or clip-art images to the screen.

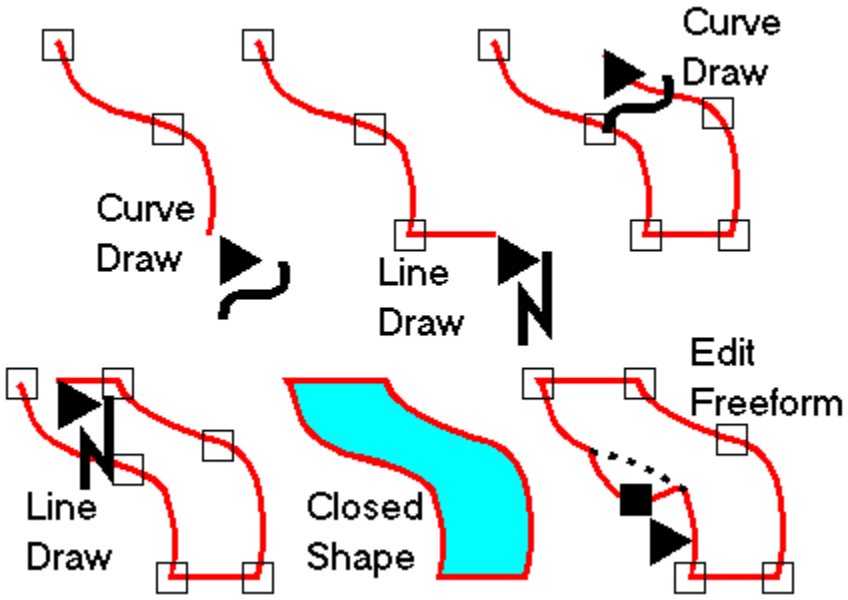


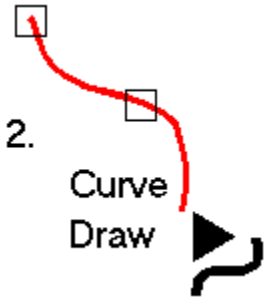


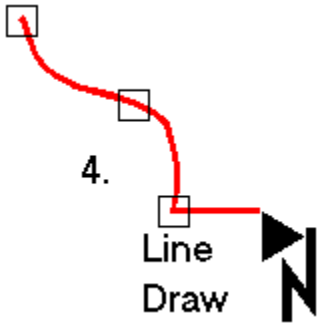


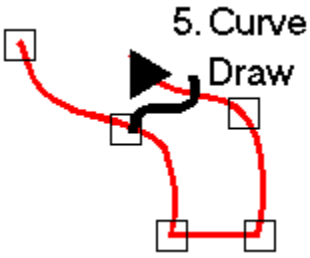


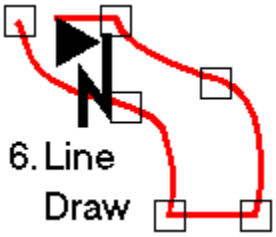



Curve
Draw
Curve
Draw
Line
Draw
Line
Draw
Closed
Shape
Edit
Freeform

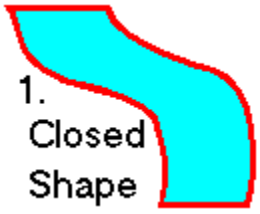

2.
Curve
Draw


4.
Line
Draw

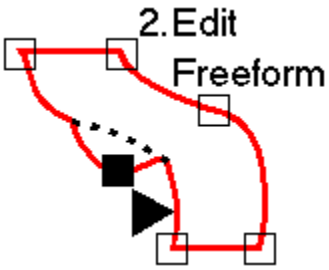

5. Curve
Draw

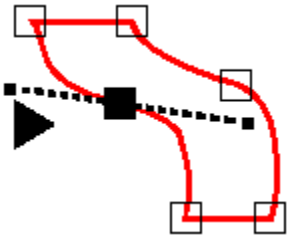


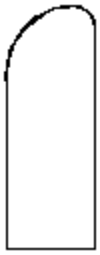
6. Line
Draw

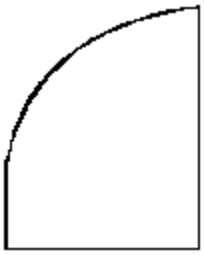


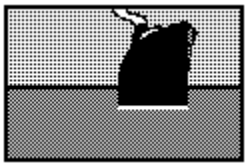
1. Closed Shape


2. Edit
Freeform

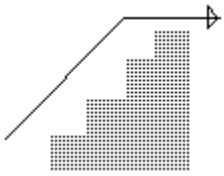




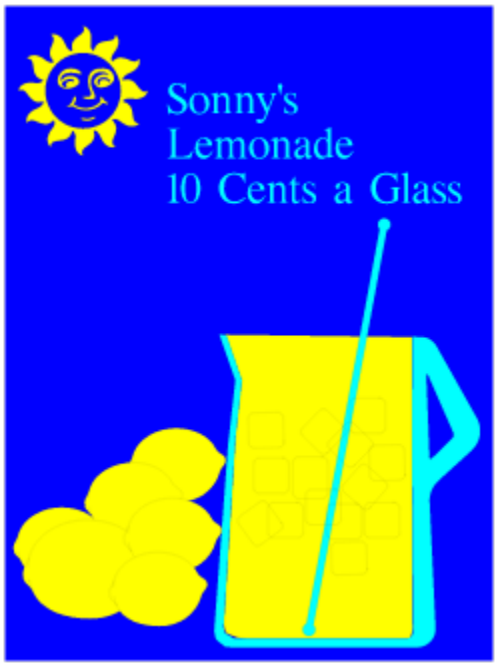


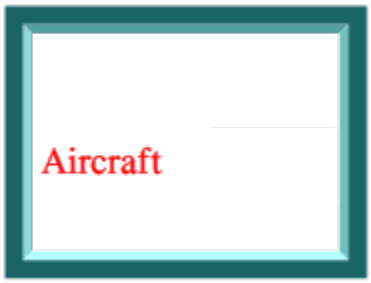


Gallery
Area
✓ Bar
Line
Pie
Point



Parker Bluffs


Sonny's
Lemonade
10 Cents a Glass

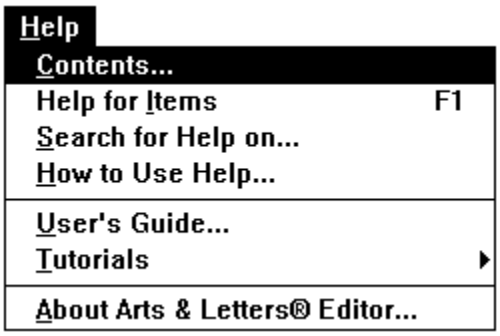

Aircraft

Aircraft
Textiles

Aircraft
$105,000,000
Textiles
$35,000,000

Aircraft
$105,000,000
Textiles
$35,000,000

The Huge Company
First Quarter Revenues 1991
First Quarter Revenues 1994
Aircraft
Textiles


Help
Contents...
Help for Items F1
Search for Help on...
How to Use Help...
User's Guide...
Tutorials
About Arts & Letters® Editor...

Choose "Include Thumbnail" to create a thumbnail image for the GED. The thumbnail image allows you to preview the document before opening it.

If the document has been saved previously, choosing the "Make Backup" option will retain the old document when the new one is saved. The old document will be given an extension of BAK.

Enter a file name (up to 8 characters) in the File Name window.

Click on OK to save the document to disk.

Choose the directory where the document is to be saved in the Directories window.

Choose a file extension in the Save Files as Type window.

This window displays all the files in the current directory of the type specified in the Save Files as Type window.

Specify the drive where the document is to be saved in the Drives window.

The document will print using the default printer if the Default Printer option is chosen.

Click on Specific Printer if you choose not to use the default printer. Click on the scroll bar to display the list of available printers. Point on a printer in the list and click the left mouse button. The printer name becomes highlighted.

Choose Portrait or Landscape for the Page Orientation.

Choose the Source and Size of paper for printing your document.

Clicking on Options takes you to the standard Windows Print dialog boxes. Provided the printer supports the options, DRAW will use the Windows options that you choose.

Click on OK to select all of the options you have chosen.

Step-by-Step Tutorial 1
Selecting and Placing Objects

This tutorial shows you how to:

- Set the Target Printer and Page Layout
- Set the Viewing Level
- Select and Place a symbol
- Enter and Place Text
- Save a Document and Exit Draw

Selecting and Placing Objects Preview

TUTORIAL 1
PREVIEW

Set the Target Printer and Page Layout

Each time you start Draw, you should check the page and printer setup and change them if desired. This ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the File menu and choose Print Setup. The Print Setup dialog box appears.
2. Click on the Default Printer or one from the Specific Printer list.

See Example

3. Choose Landscape (horizontal page) Orientation and Letter 8 1/2 x 11 (Paper Size) and click on OK.

See Example

4. At this point, you might see a message box that reads, "Printer page size does not match document page size. Respecify Page Setup?"

   If you see this message, click on Yes.

5. Pull down the File menu and choose Page Setup. The Page Setup dialog box appears.

   Click on Use Printer Page to reset the document page size and orientation to the same values you specified for the target printer in step 3.

   At this point you can click on Custom to specify a page size of your own. If you plan to create an illustration larger than 22 inches on either side, choose Banner.

   You can click on Get Printer Minimums to reset the page margins to the minimum allowed by the target printer, and then increase the margins if desired.

   Click on OK.

Viewing Level

The viewing level determines how much of your document is displayed in the work area. When you first start Draw, the viewing level is set to "Current Page." At Current Page, objects are displayed at a size that will fit on the current page layout. If needed, you can change the view level in the View menu.

Select and Place Symbol

1. Pull down the Draw menu and select Clip-Art Manager (or click on the icon in the Toolbox, or just press Ctrl+M).

2. The Clip-Art Manager dialog box appears. In the upper Collection: window is an alphabetically-arranged selection of libraries. (Click on the down arrow to see the currently open Collections.) If there is no Collection shown, choose one from the Collections menu at the top of the dialog box.

   In the lower Image Name: window, you will see the contents of the highlighted collection. Using the scroll bar in that window, you can see the numerous symbols that are ready to be selected and placed in your document.

See Example

3. Select the collection Animals. When you do so, the Image Name list changes to display the contents of the Animals' collection.
4. Click on either the name Koala Bear in the Image Name list, or on the thumbnail view of the image itself. The name is highlighted.
5. The Add Object cursor appears when you click on Add to Document, or double-click on the thumbnail image.

   (The Clip-Art Manager dialog box disappears, the cursor turns into an Hourglass while Draw loads the symbol from the collection, and then it turns into the Add Object cursor.)
6. Place the Add Object cursor at the upper left of the work area and click. A fully colored koala bear appears on the drawing area at the default size. You could have added it at a size of your own choice by dragging the cursor instead of clicking with it.

- **See Example**
-

Enter and Place Text

1. Pull down the Draw menu and choose Words.

   -or-

   Click on the Word tool in the toolbox. The Enter/Edit Words dialog box appears.

2. Type Koala and click on Add.

See Example

The cursor turns into an Hourglass while Draw loads the typeface, and then turns into the Add Object cursor.

3. Place the Add Object cursor below the bear and click. The text is drawn using the current type settings.

See Example

Appearance of Color on Your Monitor

If you have a color monitor, the bear is fully-colored and the text has a Cyan interior with a black line.

If you have a monochrome monitor, the interior of the objects appears on your screen as a black and white pattern. There is a unique pattern for each color you select, and each pattern varies from monitor to monitor.

Saving a Document and Exiting Draw

It is always a good idea to name your documents so that you can easily understand what the documents contain.

1. To save a document in Draw, pull down the File menu and choose Save. The Save command opens the Save Document As dialog box.

   The Save Document As dialog box contains several scrolling fields. The first, File Name, is where you type the name of your document. (Remember that a document is the same thing as a file.) Since Draw saves its documents under DOS conventions, enter the name koala.ged -- a name of no more that eight characters.

2. Ensure that the directory in the Directories dialog is where you want to save the document. Also check the Drives dialog to ensure that the correct disk drive is selected. (You cannot save to CD ROM drives. They are read only; hence, Read Only Memory.)
3. Under Save File as Type, choose Graphics Files (*.GED).
4. Click on the toggle beside Make Backup. In the current directory, a duplicate of your document will be made with an extension of .bak.
5. Click on the toggle beside Include Thumbnail. When you open the document at a later time, a small image of your drawing will appear in the Show Thumbnail window.
6. Click on OK to save the document.

Exiting Draw

To exit Draw, pull down the File menu and choose Exit. At the prompt "Save Changes to (untitled)?", click on No.

Do not exit at this time if you are continuing to the next Step-by-Step Tutorial page.

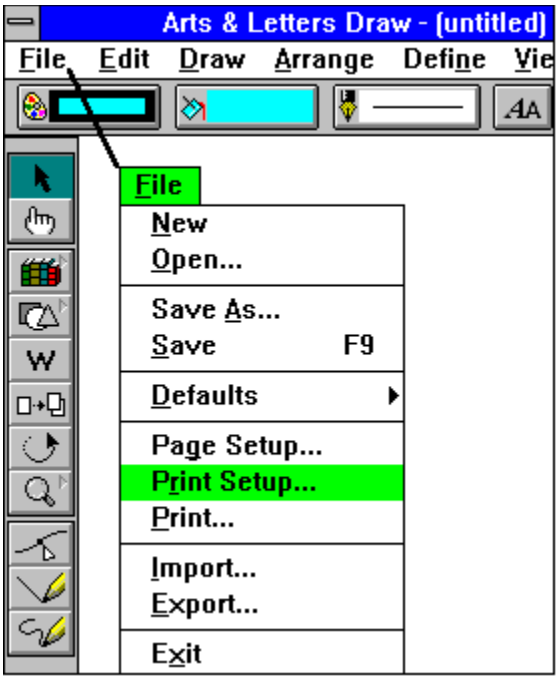
This tutorial showed you how to:

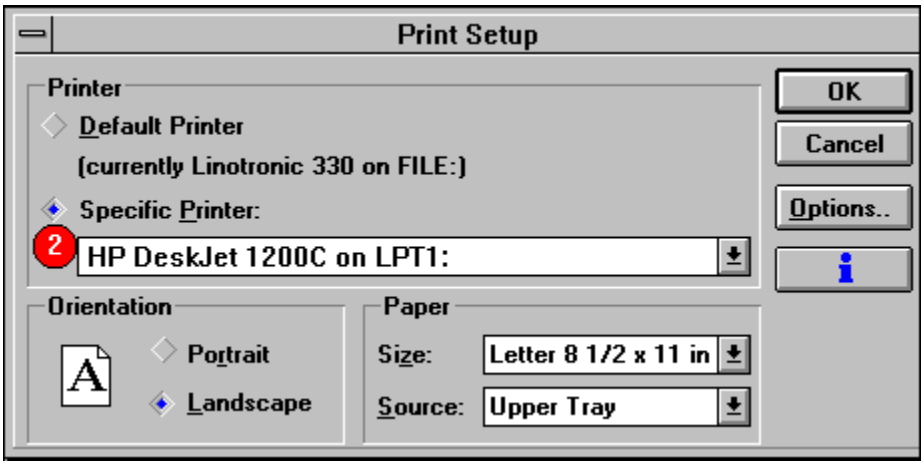
- Set the Target Printer and Page Layout
- Set the Viewing Level
- Select and Place a symbol
- Enter and Place Text
- Save a Document and Exit Draw

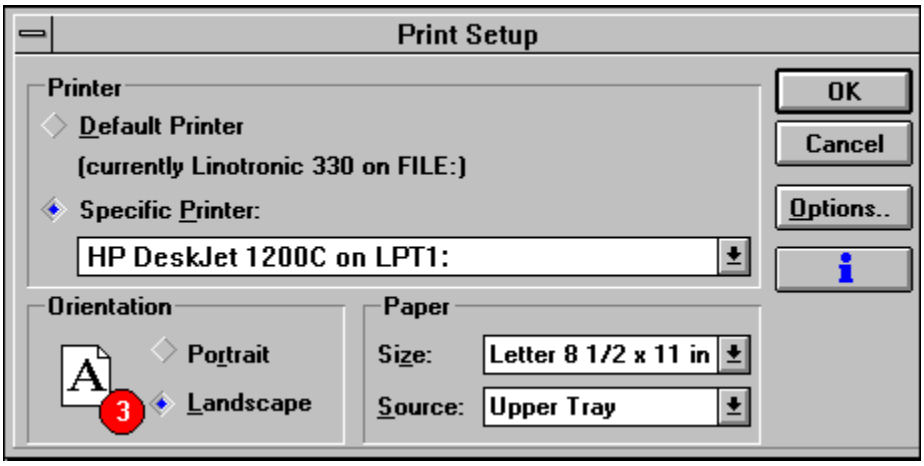
In the next tutorial you will manipulate objects and add text.

To begin the next tutorial, pull down the Tutorials menu and choose 2 Manipulating Objects.

Selecting and Placing Objects Review


Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define Vie
AA
File
New
Open...
Save As...
Save F9
Defaults
Page Setup...
Print Setup...
Print...
Import...
Export...
Exit


Print Setup
Printer
Default Printer
(currently Linotronic 330 on FILE:)
Specific Printer:
2
HP DeskJet 1200C on LPT1:
OK
Cancel
Options..
Orientation
A
Portrait
Landscape
Paper
Size:
Letter 8 1/2 x 11 in
Source:
Upper Tray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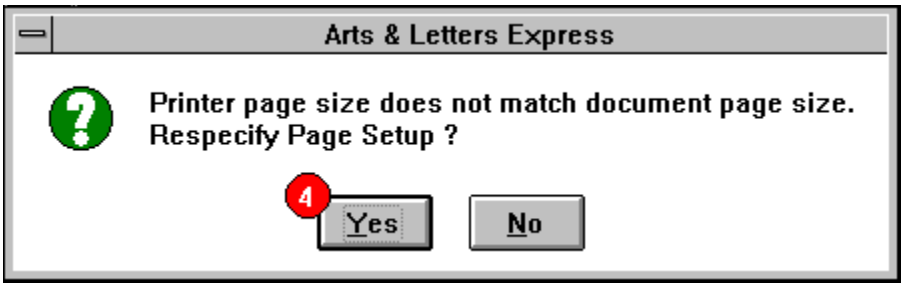
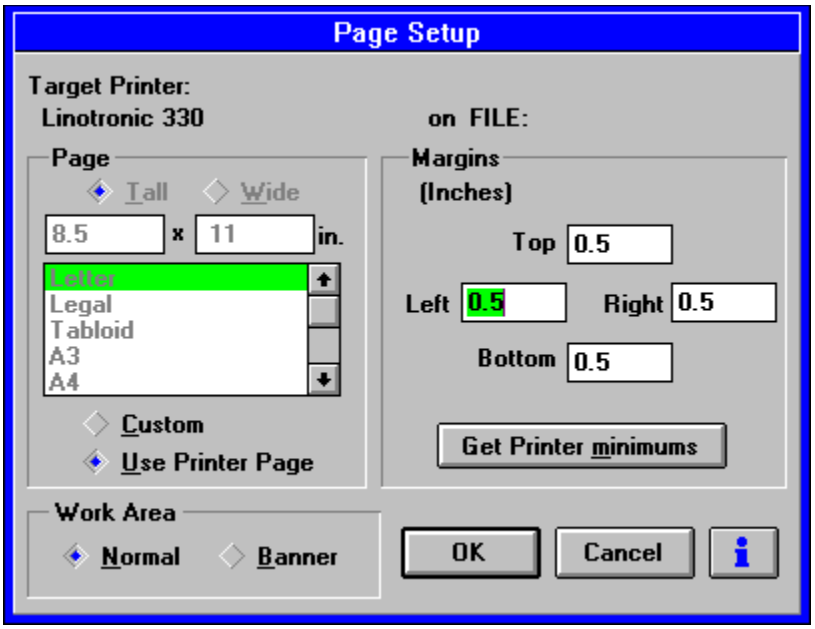
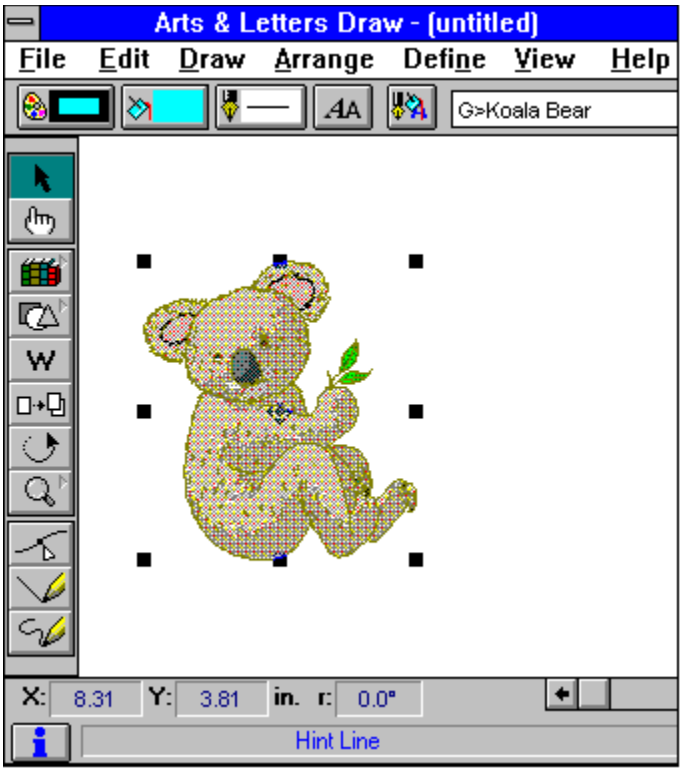
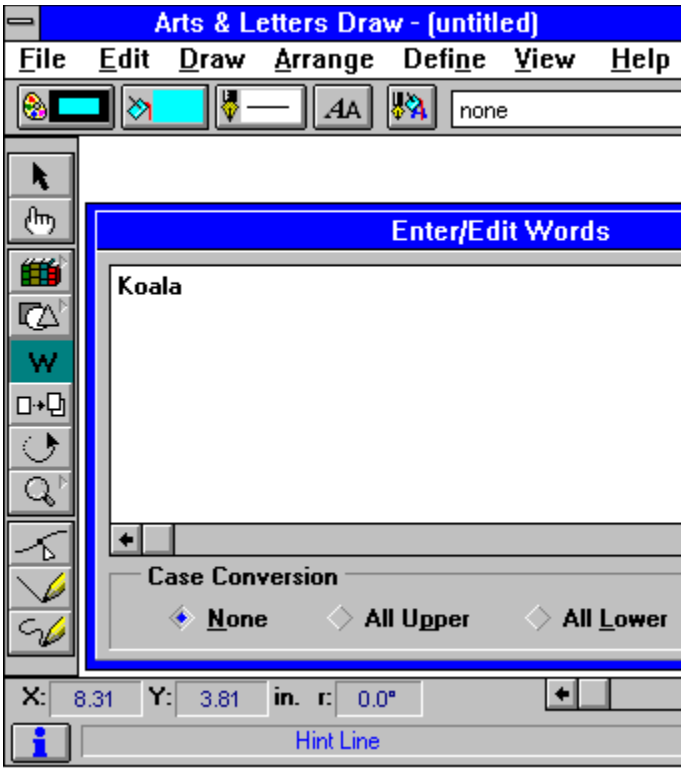
Printer
Default Printer
(currently Linotronic 330 on FILE:)
Specific Printer:
HP DeskJet 1200C on LPT1:
OK
Cancel
Options..
Orientation
Portrait
Landscape
3
Paper
Size:
Letter 8 1/2 x 11 in
Source:
Upper Tray

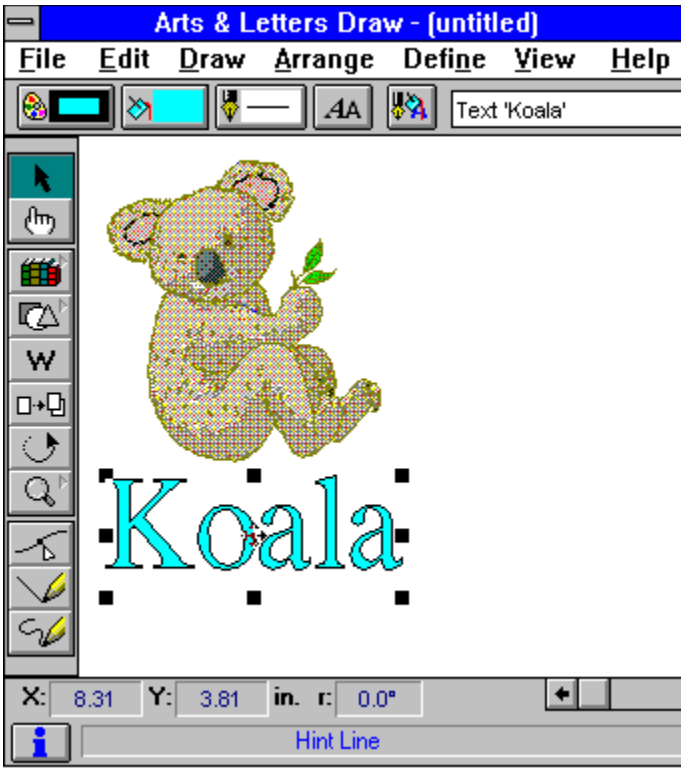

Arts & Letters Express
Printer page size does not match document page size.
Respecify Page Setup ?
4
Yes
No

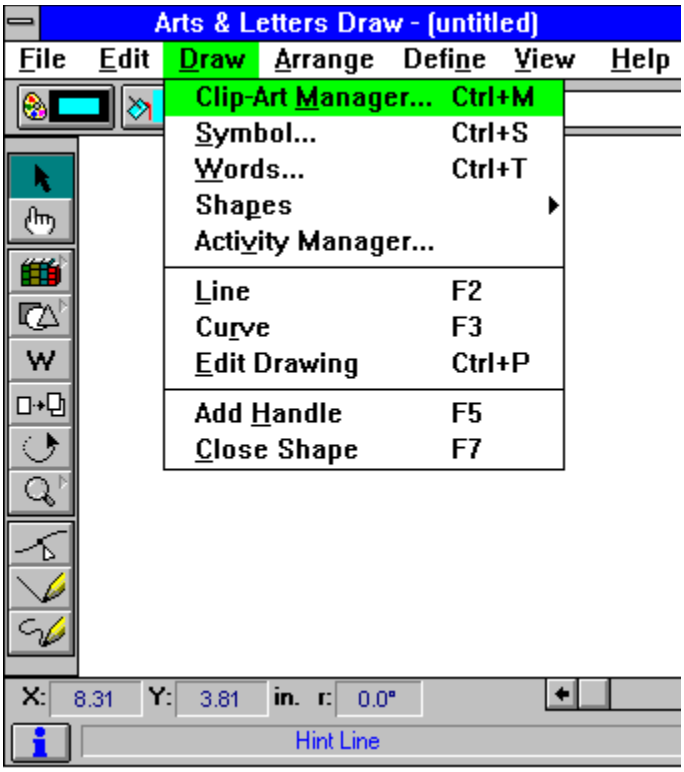

Page Setup
Target Printer:
Linotronic 330
on FILE:
Page
Tall
Wide
8.5
x
11
in.
Letter
Legal
Tabloid
A3
A4
Custom
Use Printer Page
Margins
(Inches)
Top
0.5
Left
0.5
Right
0.5
Bottom
0.5
Get Printer minimums
Work Area
Normal
Banner
OK
Cancel

ClipArt
Collections
Images
Thumbnails
Add
Save
Close
Collection:
20 Opened
Dogs
Image Name:
31 Available
Basset Hound

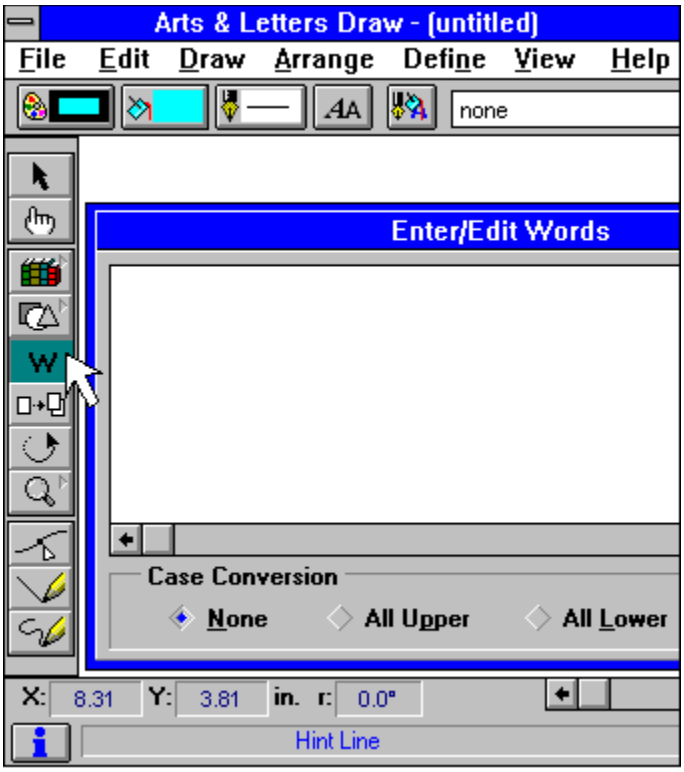

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
G>Koala Bear
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

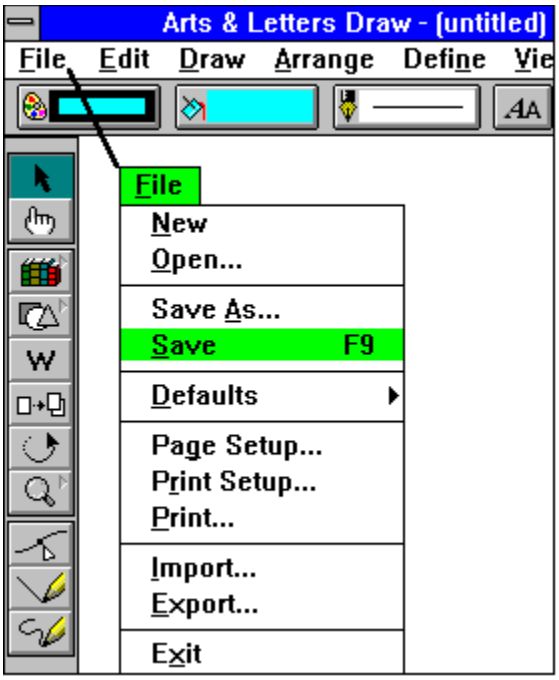

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
none
Enter/Edit Words
Koala
Case Conversion
None
All Upper
All Lower
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

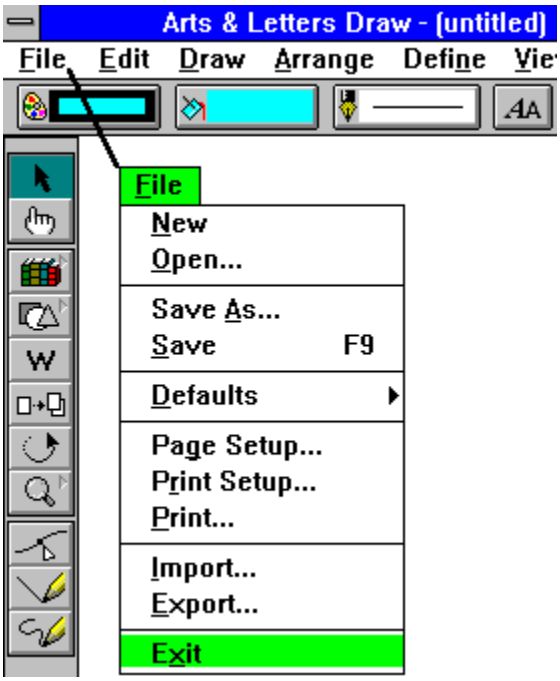

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
Text 'Koala'
Koala
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line


Arts & Letters Draw - (untitled)
File
Edit
Draw
Arrange
Define
View
Help
Clip-Art Manager... Ctrl+M
Symbol... Ctrl+S
Words... Ctrl+T
Shapes
Activity Manager...
Line F2
Curve F3
Edit Drawing Ctrl+P
Add Handle F5
Close Shape F7
X: 8.31
Y: 3.81
in.
r: 0.0°
Hint Line

ClipArt
Collections Images Thumbnails
Add Save Close
Collection: 16 Opened
Animals
Image Name: 15 Available
Koala Bear
Giraffe
Gorilla
Grizzly Bear
Hippopotamus
Koala Bear
Lioness
Mammoth (Prehistoric)
Moose
Rhinoceros
Sabertooth Tiger (Prehis)
Tiger


Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
none
Enter/Edit Words
Case Conversion
None
All Upper
All Lower
X: 8.31
Y: 3.81
in.
r: 0.0°
Hint Line


Arts & Letters Draw - (untitled)
File
Edit
Draw
Arrange
Define
Vie
AA
File
New
Open...
Save As...
Save F9
Defaults
Page Setup...
Print Setup...
Print...
Import...
Export...
Exit


Arts & Letters Draw - (untitled)
File
Edit
Draw
Arrange
Define
Vie
AA
File
New
Open...
Save As...
Save F9
Defaults
Page Setup...
Print Setup...
Print...
Import...
Export...
Exit

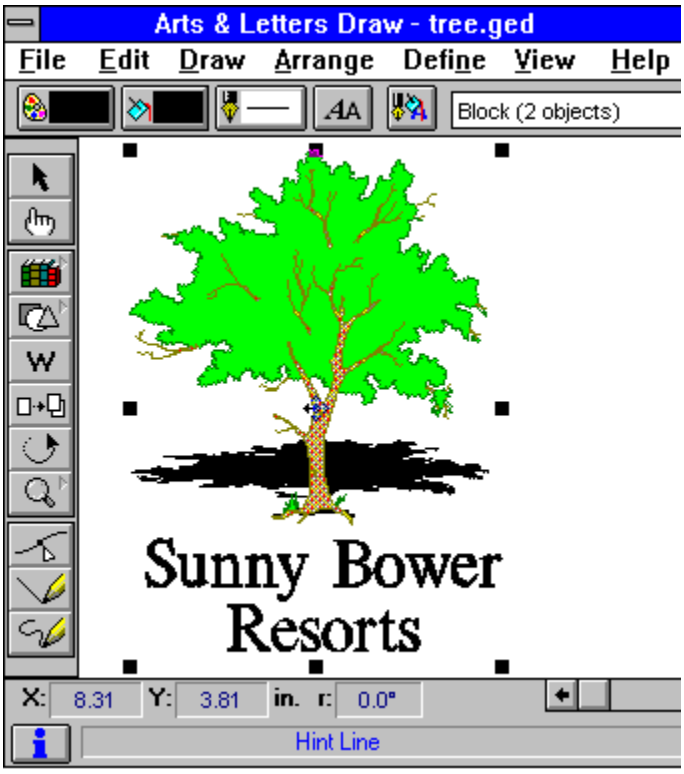
Step-by-Step Tutorial 2
Manipulating Objects and Adding Text

This tutorial shows you how to:

- Color symbols
- Duplicate symbols
- Make a Drop Shadow
- Select, Move and Resize symbols
- Block Select, Group, and Ungroup symbols
- Align Text and Symbols
- Open an existing document
- Rotate symbols
-

Manipulating Objects and Adding Text Preview

TUTORIAL 2
PREVIEW



From the previous tutorial, you already know how to:

- Specify the target printer
- Specify a page size and orientation
- Specify the viewing level
- Place a symbol in a document
- Place text in a document
- Save a document
- Exit Draw
-

Open a New File

If you are continuing from Tutorial 1, use the New command.

1. Pull down the File menu and choose New. You will be prompted to save any changes made to any open file since the last save.
2. The previous window is cleared, and a new blank work area is displayed.

Set Up Printer, Page, and Viewing Level

1. Pull down the File menu and select Print Setup.
2. Change the orientation to Landscape and then click OK.
3. Then select Page Setup from the File menu and select Use Printer Page, Get Printer minimums and Normal. Then click OK.
4. Pull down the View menu and choose Actual Size view.

- **Review this idea in Tutorial 1.**

Select and Place an Object (Symbol)

1. Pull down the Draw menu and choose Clip-Art Manager (or click on the icon in the Toolbox, or just hold down the Ctrl key and press "M" on your keyboard).
2. From the Collections list, choose the Props & Skylines collection.

See Example

3. From the Image Name list, choose "Prop-Tree". Click on the Add button. With the resulting Add Object cursor, click in an open area of your screen.
4. To change any attribute of an object you must first select it. An object is selected when it is surrounded by handles.

   The selected object's name appears in the object viewer window in the Status bar.

Color the Tree

Images in the Clip-Art Manager are pre-colored. For the purpose of this exercise we will change the tree to a different color to show you how to use the Color Palette.

With the tree selected (surrounded by handles):

1. Press Shift+G on your keyboard. This keystroke breaks apart the group.
2. Click among the symbols until "Symbol #20305" appears in the object viewer in the Style bar. (You may need to hold down the Control key as you click.)

3. Click the Color style button on the Styles bar. The Color palette appears.
4. Choose one of the available Browns.

   Whenever you change the color of an object, you can apply the color to the interior fill of the object, the lines/outlines that define the object, or both. In this case, we only want to change the color of the Beg(inning) Fill.

   (In Draw, End Fill applies only to the second color of gradients and raster and vector fills.)

   You can toggle the Fill and Line option boxes on and off by clicking on them. Make sure that just Beg Fill is selected.
5. The color of the leaves changes from green to brown.

Duplicate an Object

This exercise will teach you how to use the Duplicate tool. This tool is handy for making copies of objects quickly. For example, to make a shadow or a drop shadow, you need to duplicate the object then drag the duplicate. The Duplicate tool allows you to make copies and drop shadows.

To duplicate an object for use as a drop shadow:

1. Pull down the Draw menu and choose Clip-Art Manager (or click on the icon in the Toolbox, or just press Ctrl+M).
2. From the Collections list, choose the Props & Skylines collection.
3. In the Image Name list, double-click on Prop-Tree. The Clip-Art Manager closes and a cursor for placement of the tree appears. Click once in an open area to place the tree on your screen.
4. From the Arrange menu choose Duplicate, or select the Duplicate tool from the Toolbox.
5. The duplicate cursor appears. Click on the tree with this cursor and drag it a short distance from the original.

See Example

Dismiss the duplicate cursor by clicking with the content menu mouse button.

6. With the duplicate selected, click the Color style button on the Styles bar. Click on Fill & Line and then the color black.

See Example

7. Place the shadow behind the tree by selecting the shadow and pressing Shift+F. You may need to drag the shadow to position it properly behind the tree.

See Example

Resize Symbols

You will often need to resize Draw's ready-made symbols for the effect you want. The shadow currently makes the tree look two-dimensional. This may be useful, but it's just as easy to give a three-dimensional effect.

1. With the shadow selected, point on the upper middle handle (the small black square) and hold the mouse button.
2. Drag the bounding box downward, making the shadow very flat.

Save Your Work

Save your work at this point.

1. Pull down the File menu and choose Save As.

   -or-

   Press F9.

2. The Save Document As dialog box appears. Type "tree" in the upper left window.

   Before proceeding, place a check mark in the box in front of Include Thumbnail. Doing so will display a small picture of the contents of the file before opening it in a future session.

   Click on OK.

See Example

The illustration is saved in a file called "tree.GED." (The .GED extension is the default. You can specify any extension you want.) Note that the title bar on the top of the Draw screen changes from "(untitled)" to "tree.GED."

3. You can use this illustration with the following tutorials.

Add Text

Text (or words) can also be considered graphic images, and can be manipulated as such on the drawing area. You can control line and fill as well as shape and position.

To add text:

1. Pull down the Draw menu and choose "Words".

   -or-

   Click on the Word tool in the toolbox. The Enter/Edit Words dialog box opens.

2. Type "Sunny Bower". Press Enter to advance to the next line. (The enter key in this case does not add the text to your document.) Type "Resorts".

See Example

3. Click on Add. The Pointer turns into the Add Object cursor. (The text is placed on your screen just like the clip art you found in the Clip-Art Collections.)
4. Move the cursor above and to the left of the tree and click. The text is placed above it. If you don't like the default. size of the text, select it, point on a corner handle (small black square) and drag it to size.

Align Text

The default alignment for multiple lines of text is flush left.

To center the two lines of text relative to the longest line of text:

1. Click on the Type style button and then on the Define button. The Define Type dialog box appears.
2. Select Centered alignment, then click on Apply.

Block Select and Group Objects

Block select allows you to select several objects at one time. It is like casting a lasso around the objects you want, binding them together as one object. The objects remain bound together only as long as they are selected. To keep them bound, form a Group of the block selected objects. Any group that you form can be ungrouped.

To Block Select and Group the objects on your screen:

1. Pull down the Edit menu and choose Block Select.

   -or-

   Click on the Block Select tool in the toolbox.

The Block Select cursor appears.

2. Point the cursor above and to the left of the tree and its shadow.
3. Hold the mouse button and drag the block select bounding box completely around the tree and its shadow to the opposite diagonal corner.

   Release the mouse button. The status bar above the work area should display Block (2 objects).

- **See Example**

4. Pull down the Arrange menu and choose Group.

   -or-

   Hold down the Ctrl key and press G on your keyboard.

   The tree and its shadow are grouped as a single object, and the Status Bar now displays Group.

5. Pull down the Arrange menu and choose UnGroup.

   -or-

   Hold down the Shift key and press G on your keyboard.

   The tree and its shadow are now ungrouped and are two separate objects, and the Status Bar again displays Block (2 objects).

   For the purposes of the next exercise, regroup the tree and its shadow, as explained in step 4.

Align Objects

Center the text under the trees:

1. Pull down the Edit menu and choose Select All.

   -or-

   Hold down the Alt key and press "A".

   One set of handles appears around the title and the tree group. The object viewer in the Style bar should display Block (2 objects).
2. Pull down the Arrange menu and choose Align. The Align dialog box appears.
3. Choose Center in the Left to Right orientation and click on Apply. The tree and its text are centered along the vertical axis.
4. With both objects still selected, point and drag to move the objects to the center of the document.

Exit Draw

At times you will need to exit Draw before completing a document. A document can be saved and Draw closed at any time. Later, when you return to Draw, you can open your document (a GED) and pick up where you left off.

Pull down the File menu and choose Exit.

A message box will prompt you to save your work if you have not already done so. Click on Yes to save the document before exiting Draw. If needed, assign a name to the document.

Open an Existing File

To resume work on the document:

1. Pull down the File menu and choose Open. The available document files are listed in the Open dialog box filename list.
2. Choose "tree.GED" and click on Open. Your illustration is displayed on the screen.

Rotate

Rotating the shadow of the tree will make it appear to be on a slope.

1. Select the tree. If it is still grouped, hold down the Shift key and press G on your keyboard to ungroup it.
2. Select the shadow.
3. Select the Rotate tool from the Toolbox.

4. Point with the mouse on the upper right corner and drag it downward. Watch values change in the r: box in the numeric bar at the bottom of your screen. When about 10 degrees appear, release the mouse button.

Tutorial 2 Review

This tutorial showed you how to:

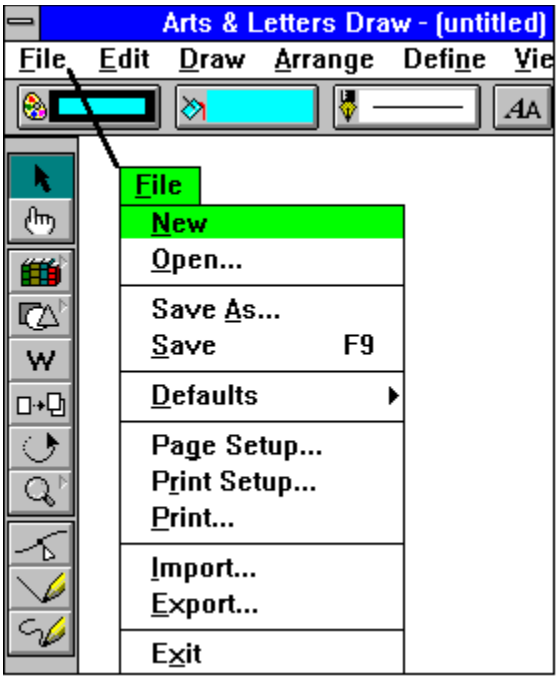
- Color symbols
- Duplicate symbols
- Make a Drop Shadow
- Select, Move and Resize symbols
- Block Select, Group, and Ungroup symbols
- Align Text and Symbols
- Open an existing document
- Rotate symbols

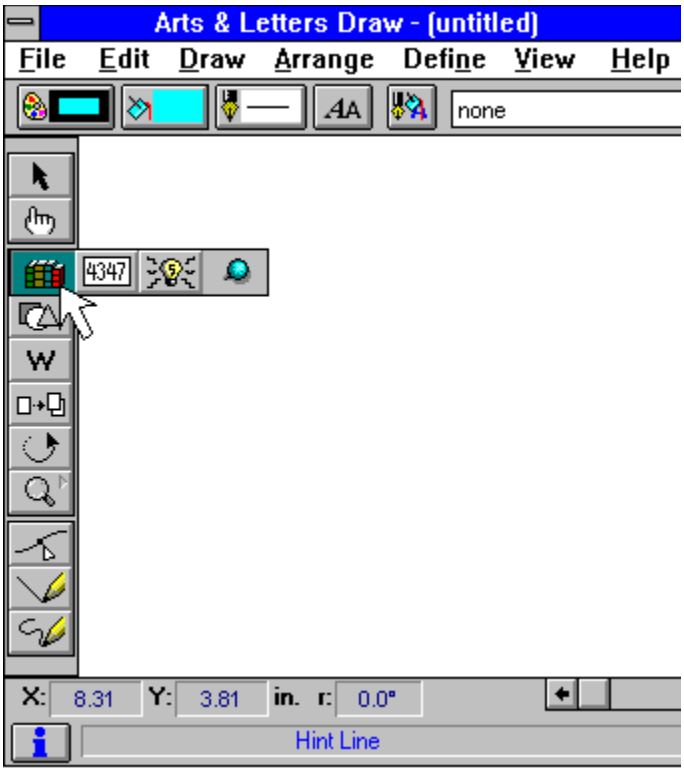
In the next Tutorial you will learn to Manipulate text.

To begin the next tutorial, pull down the Tutorials menu and choose "3 Manipulating Text".

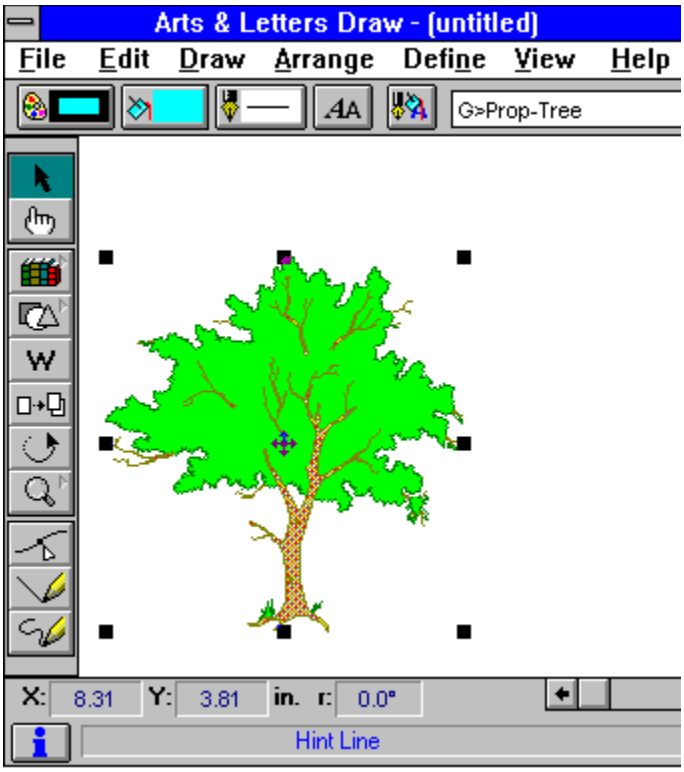
Manipulating Objects and Adding Text Review

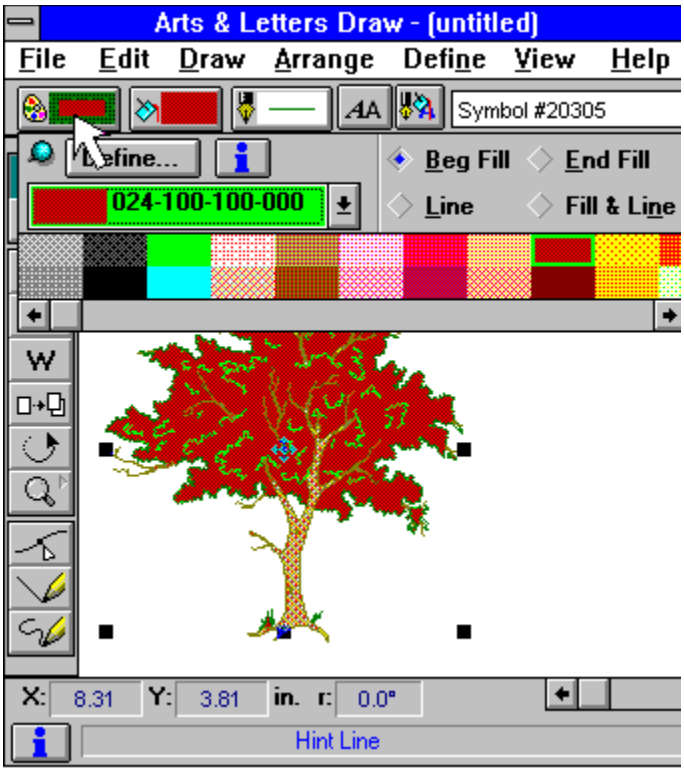
TUTORIAL 2
REVIEW

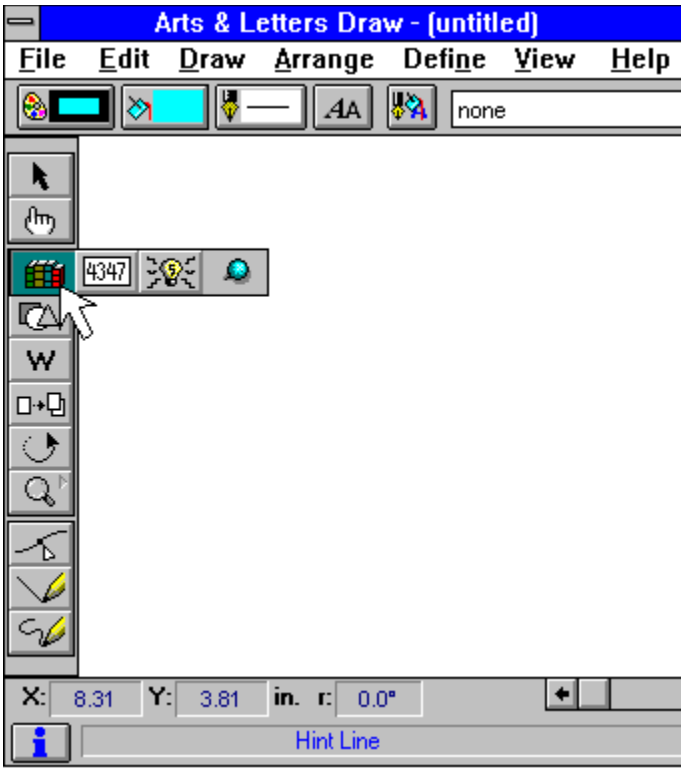

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define Vie
AA
File
New
Open...
Save As...
Save F9
Defaults
Page Setup...
Print Setup...
Print...
Import...
Export...
Exit

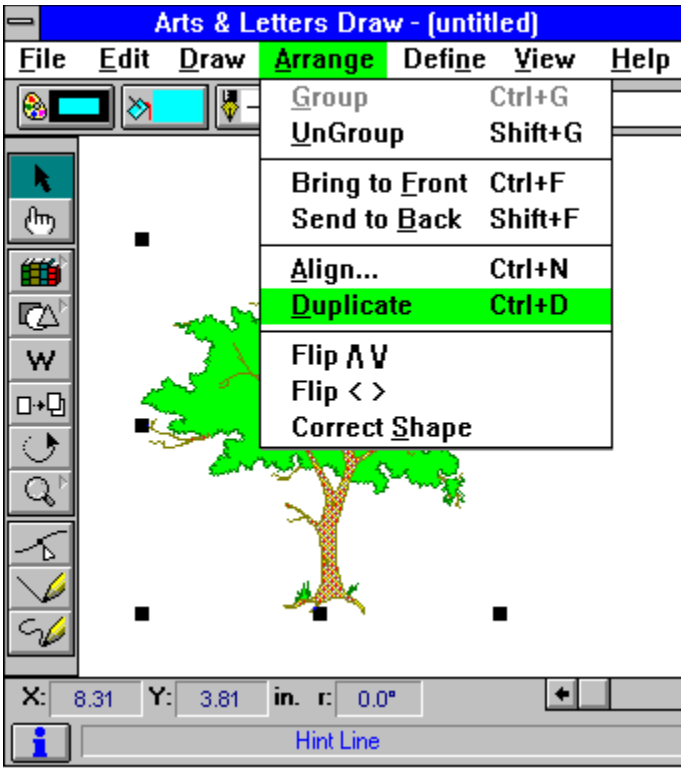

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
none
4347
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

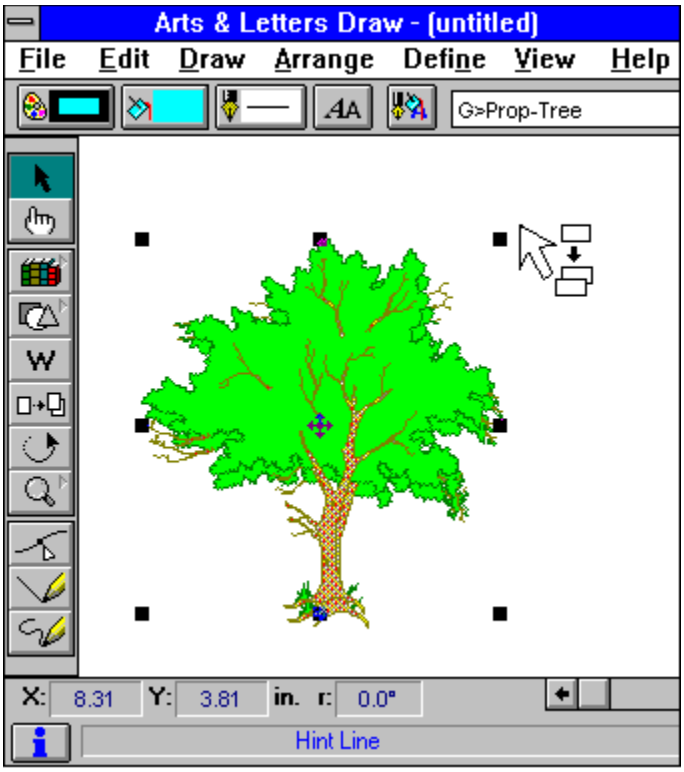
ClipArt
Collections
Images
Thumbnails
Add
Save
Close
Collection:
16 Opened
Props & Skylines
Image Name:
26 Available
Prop-Tree

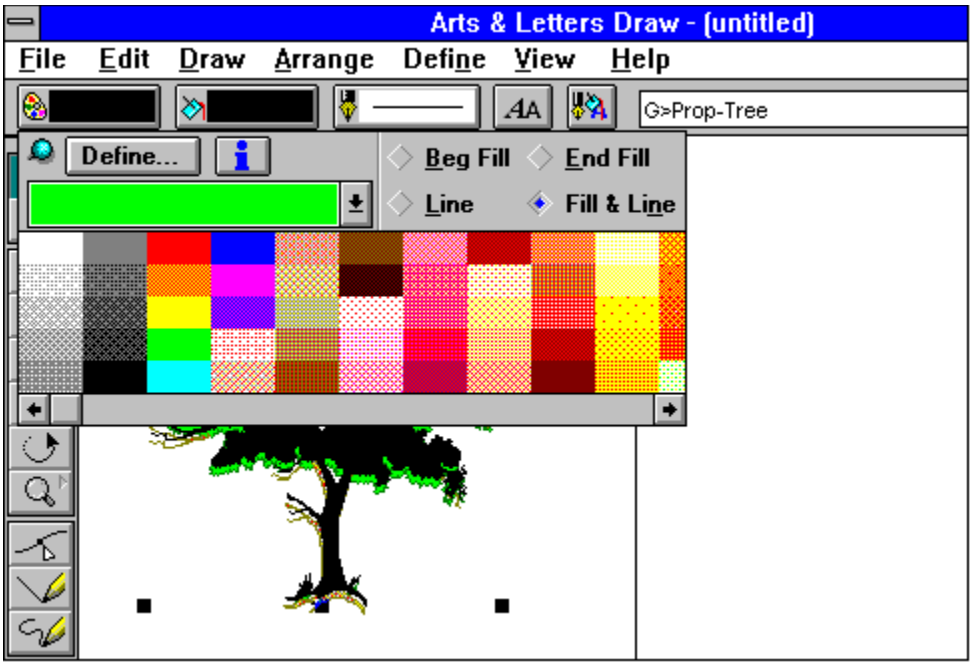

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
G>Prop-Tree
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

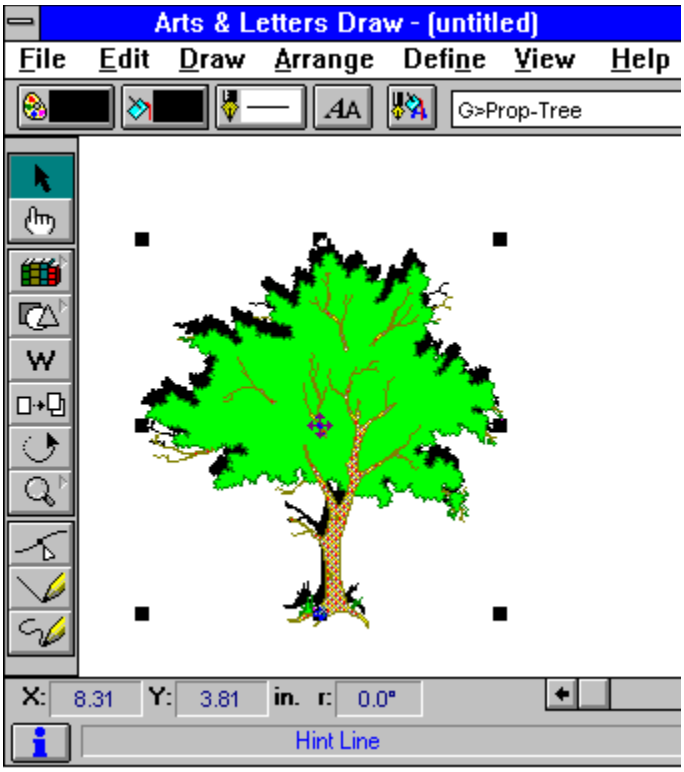

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
Symbol #20305
Define...
Beg Fill
End Fill
Line
Fill & Line
024-100-100-000
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

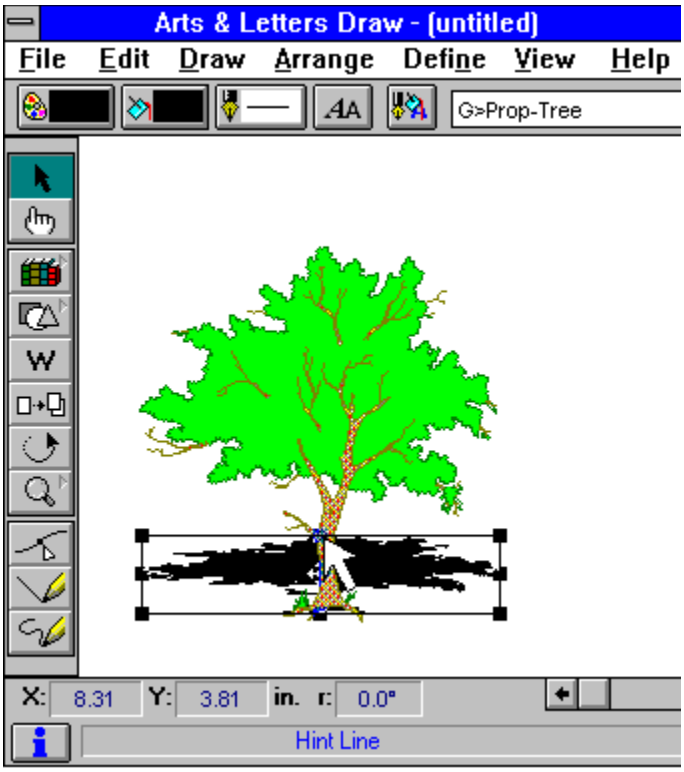

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
none
4347
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

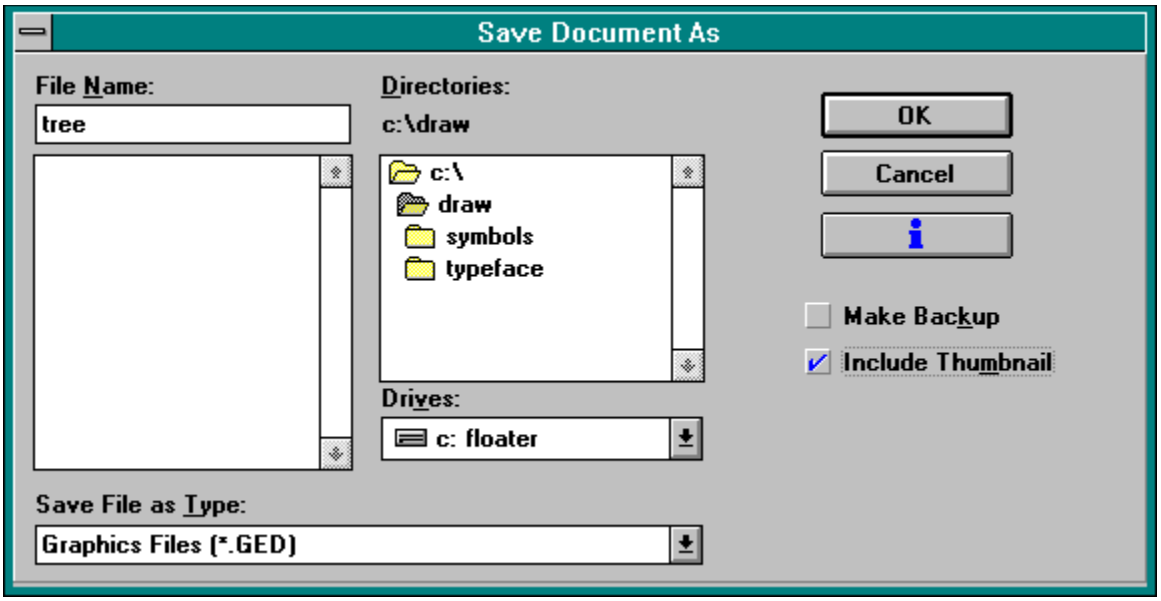

Arts & Letters Draw - (untitled)
File
Edit
Draw
Arrange
Define
View
Help
Group Ctrl+G
UnGroup Shift+G
Bring to Front Ctrl+F
Send to Back Shift+F
Align... Ctrl+N
Duplicate Ctrl+D
Flip ∧ ∨
Flip < >
Correct Shape
X: 8.31
Y: 3.81
in.
r: 0.0°
Hint Line

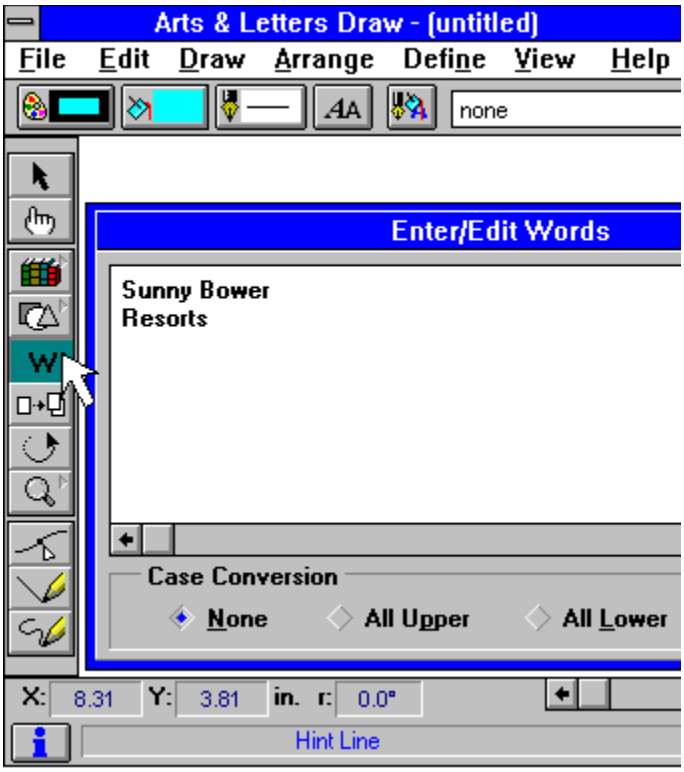

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
G>Prop-Tree
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

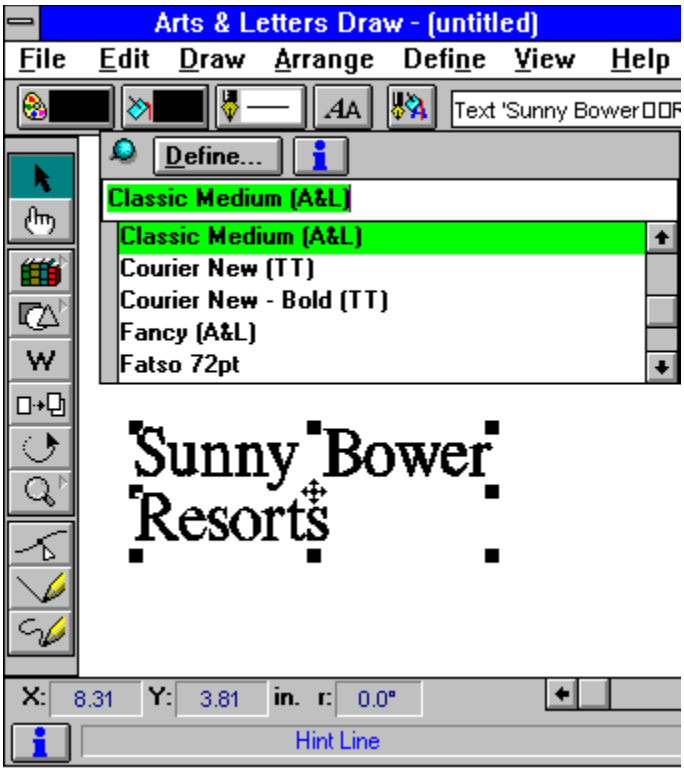

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
G>Prop-Tree
Define...
Beg Fill
End Fill
Line
Fill & Line

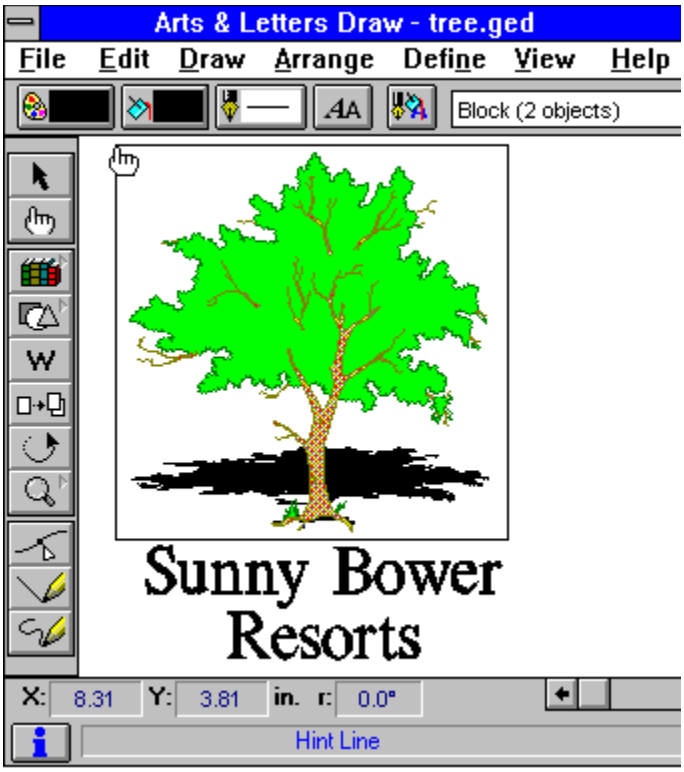

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
G>Prop-Tree
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

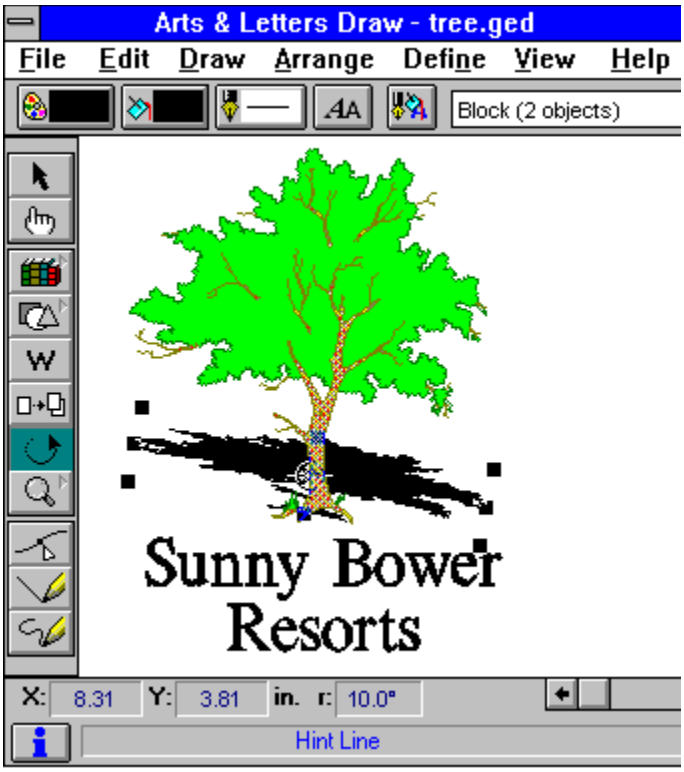

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
G>Prop-Tree
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line


Save Document As
File Name:
tree
Directories:
c:\draw
c:\
draw
symbols
typeface
OK
Cancel
Make Backup
Include Thumbnail
Drives:
c: floater
Save File as Type:
Graphics Files (*.GED)


Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
none
Enter/Edit Words
Sunny Bower
Resorts
Case Conversion
None
All Upper
All Lower
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line


Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
Text 'Sunny Bower
Define...
Classic Medium (A&L)
Classic Medium (A&L)
Courier New (TT)
Courier New - Bold (TT)
Fancy (A&L)
Fatso 72pt
Sunny Bower
Resorts
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line


Arts & Letters Draw - tree.ged
File Edit Draw Arrange Define View Help
Block (2 objects)
Sunny Bower
Resorts
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line


Arts & Letters Draw - tree.ged
File Edit Draw Arrange Define View Help
Block (2 objects)
Sunny Bower
Resorts
X: 8.31 Y: 3.81 in. r: 10.0°
Hint Line

Step-by-Step Tutorial 3
Manipulating Text

This tutorial shows you how to:

- Change typeface, type size, and letter spacing
- Edit type attributes
- Italicize type
- Use the Clip-Art Manager creatively

The Huge Company
First Quarter Revenues
Aircraft
$105,000,000
Textiles
$35,000,000

From the previous tutorials, you already know how to:

- Specify the viewing level
- Place symbols and text in a document
- Size a symbol
- Color an object
- Align objects
- Block Select objects
- Group objects
-

Open a New File

If you are continuing from the previous tutorial, use the New command.

1. Pull down the File menu and choose New. You will be prompted to save any changes made to the open document since the last save.
2. The previous window is cleared, and a new blank work area is displayed.

Set the Target Printer and Page Layout

Each time you start Draw, you should check the page and printer setup and change them if desired. This ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the File menu and select Print Setup.
2. Change the orientation to Landscape and then click OK.
3. Then select Page Setup from the File menu and select Use Printer Page, Get Printer minimums and Normal. Then click OK.
4. Pull down the View menu and choose Current Page view for the purposes of this tutorial.

Review this idea in Tutorial 1.

Place the Background

It's important to stay alert to the possibilities of clip art available in the Clip-Art Manager. Remember that clip art in Draw is not static -- you can delete the parts you don't want and alter the image in other ways to suit your needs. In this case we will take a clip-art image and discard the part not useful to the total image that we want to create.

1. Click on the Clip-Art Manager icon in the Toolbox, or just hold down the Ctrl key and press M on your keyboard. -- Simpler still, just press the Enter key when no other operation is in progress.
2. From the Collections list, choose the Scenery/Landscapes collection.
3. From the Image Name list, double-click on Seascape-Carrier.

See Example

4. Select the clip art, and break apart the group by holding down the Shift key and pressing G. The object viewer shows Block (4 objects).
5. Click among the objects until you see G>The Eisenhower displayed in the object viewer. Press the delete key. The remaining objects will form the background for the work to follow.
6. Make a single object of all the objects on your screen by pressing Ctrl+A (to select all objects) then pressing Ctrl+G (to form a single group).
7. To help in future selection of objects on your screen, use the cursor to highlight the word Group in the object viewer. Type the words "my background." Press Enter on your keyboard. This name will now be displayed whenever the background object is selected.

Add Text

1. Choose Words from the Draw menu or click on the Word tool in the toolbox. Type "Aircraft" and place it on the background that you labeled "my background" in the previous steps.
2. Move the text to the left-hand side of the background.

See Example

3. Place the word "Textiles" on the background.
4. Move the text to the right-hand side of the background.

See Example

5. Add the text "$105,000,000" to your document.
6. Place the text under Aircraft.
7. Add the text "$35,000,000" to your document.
8. Place the text under Textiles.

Block Select

You can select several objects and change their attributes simultaneously.

1. Choose Block Select from the Edit menu, or click on the Block Select tool in the toolbox.
2. Position the cursor above the word Aircraft, and to the left of both Aircraft and $105,000,000. Hold the mouse button and drag the block select bounding box so that all four text objects are selected.

See Example

3. Release the mouse button, and the window in the Style bar should read "Block (4 objects)."

Change Typeface

1. Click on the Type style button in the Style bar, then on the Define button. The Define Type dialog box appears.
2. Choose Modern Medium from the list and click on Apply. The text objects redraw in Modern Medium.
3. Make the type stand out from the background by clicking on the Color style button and changing both the fill and line color to Red.

See Example

Specify Type Size and Letter Spacing

To change the size of a text object; either drag a handle or:

1. Make sure the four text objects are still selected. Click on the Type style button in the Style bar, then on the Define button. The Define Type dialog box appears.
2. Enter 26 (point size) in the Size field.
3. Click on Spacing.

   The Type Spacing dialog box appears.

4. Enter 2 in the Letter (spacing) field and click on Apply. Click on Apply in the Define Type dialog box. The selected text objects redraw using the values specified.
5. Block Select $105,000,000 and $35,000,000. Click on the Type style button then on the Define button. Change the size to 18 points.

Left Align

To align Aircraft and $105,000,000 flush left:

1. Use the Block Select tool to select Aircraft and $105,000,000.
2. Choose Align from the Arrange menu (or hold down the Ctrl key and press N on your keyboard). The Align dialog box appears. Choose Left in the Left to Right orientation.
3. Click on Apply. The text is redrawn, flush left.
4. If necessary, move the block-selected text to position it in the background box.

Right Align

To align Textiles and $35,000,000 flush right:

1. Block Select (with) Textiles and $35,000,000.
2. Choose Align from the Arrange menu (or hold down the Ctrl key and press N on your keyboard). Choose Right in the Left to Right orientation. Click on Apply.
3. If necessary, move the block-selected text to position it in the background box.

Bottom Align

To align the text on the same baseline:

1. Use the Block Select tool to select Aircraft and Textiles.
2. Choose Align from the Arrange menu (or hold down the Ctrl key and press N on your keyboard). Choose Bottom from the Top to Bottom orientation, and click on Apply. The text redraws with the objects aligned along a common baseline.
3. Block Select $105,000,000 and $35,000,000.
4. Choose Align from the Arrange menu. Choose Bottom from the Top to Bottom orientation, and click on Apply. The text redraws along a common baseline.

Add Titles

Add the main title and a subtitle:

1. With no objects selected, click on the Words tool and add the text "The Huge Company" at the top of your document.
2. Add the text "First Quarter Revenues" under the title.

Adjust Type Size and Color

1. Use the Block Select tool to select the sub title First Quarter Revenues and the title The Huge Company.
2. Click on the Type style button in the Style bar, then on the Define button. Change the type size to 14 points.
3. Click the Color style button and change the fill color to Blue.

See Example

Italicize

To italicize the subtitle:

1. Select the subtitle, then click on the Type style button then on the Define button.
2. Click on Italic in the Styles box.
4. Enter 10 in the Italic field and click on Apply.

   The subtitle redraws in italics slanted 10 degrees right.

   Note: you could have entered a negative number to slant the text to the left.

Group

To group the background and its text:

1. Use the Block Select tool to select The Huge Company and First Quarter Revenues.
2. To group the objects, hold down the Ctrl key and press G on your keyboard. Now the symbol and the text objects will be treated as one object.
3. Make one group of all the other text in the same way. You now have three objects on the screen: the title lines, the other grouped text, and the background.

Centering objects

To center the titles above the grouped object:

1. Choose Select All from the Edit menu.
2. Choose Align from the Arrange menu.
3. Choose Center in the Left to Right orientation. Click on Apply. The titles redraw, centered above the grouped object.
4. Save the completed illustration to the filename Revenues.GED.

Tutorial 3 Review

This tutorial showed you how to:

- Change typeface, type size, and letter spacing
- Edit type attributes
- Italicize type
- Use the Clip-Art Manager creatively

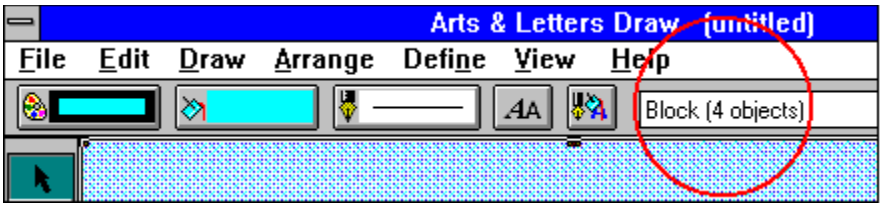
In the next Tutorial you will learn freeform drawing.

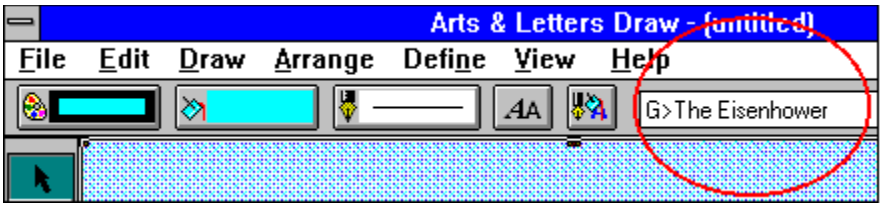
To begin the next tutorial, pull down the Tutorials menu and choose 4 Freeform Drawing.

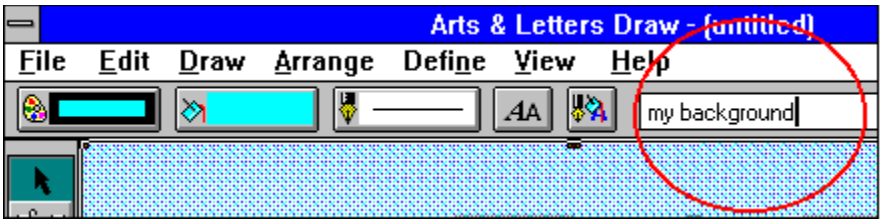
Manipulating Text Review

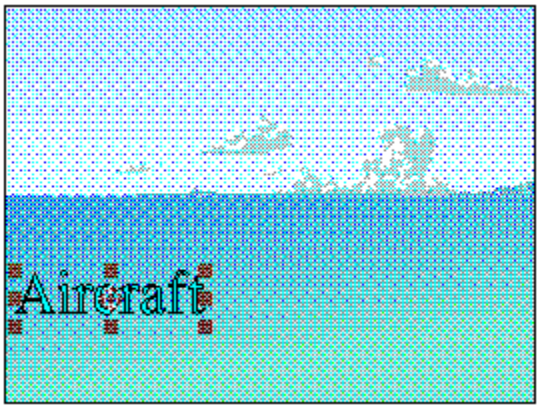
TUTORIAL 3
REVIEW

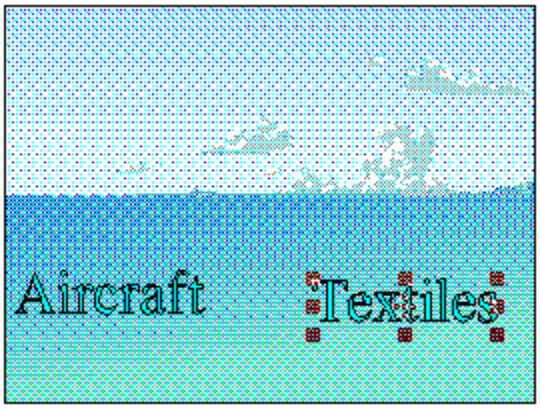
ClipArt
Collections
Images
Thumbnails
Add
Save
Close
Collection:
16 Opened
Scenery/Landscapes
Image Name:
15 Available
Seascape-Carrier

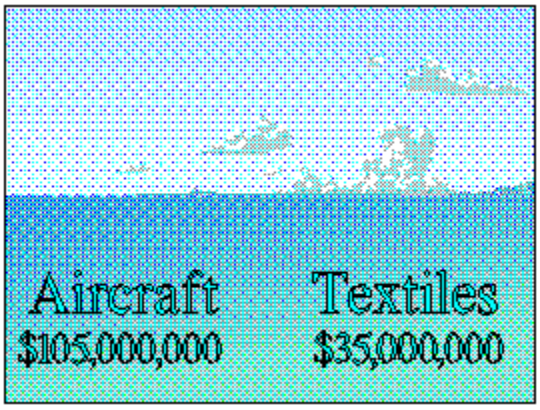

Arts & Letters Draw - (untitled)
File
Edit
Draw
Arrange
Define
View
Help
AA
Block (4 objects)

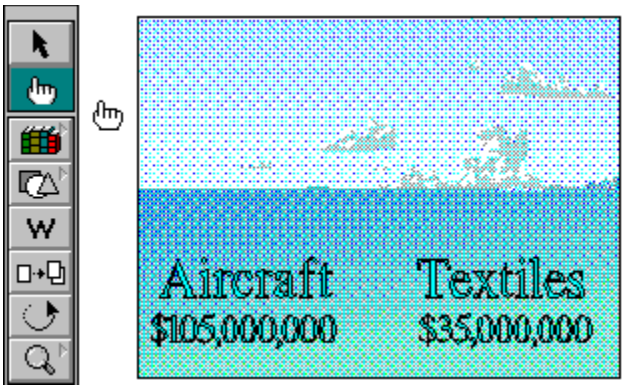

Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
AA
G>The Eisenhower

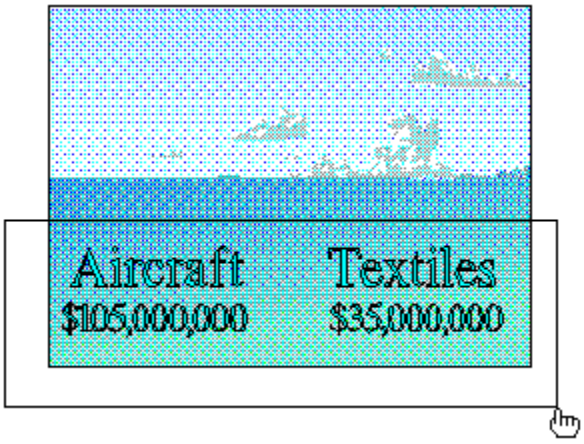

Arts & Letters Draw - [untitled]
File Edit Draw Arrange Define View Help
AA
my background


Aircraft

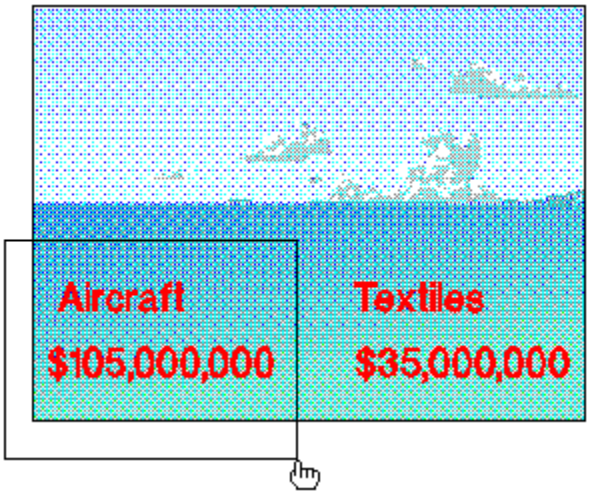

Aircraft
Textiles

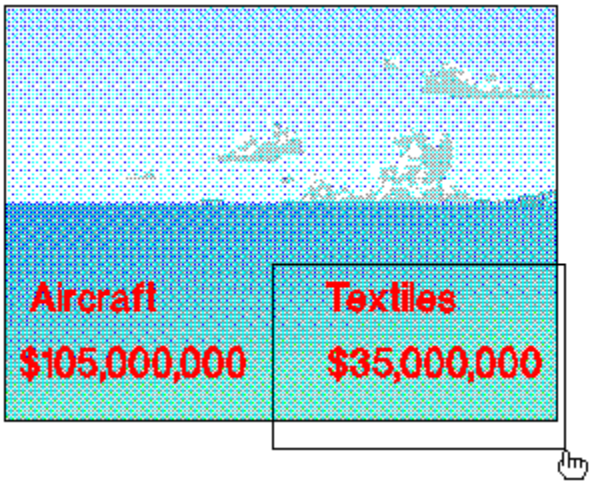

Aircraft
$105,000,000
Textiles
$35,000,000


Aircraft
$105,000,000
Textiles
$35,000,000

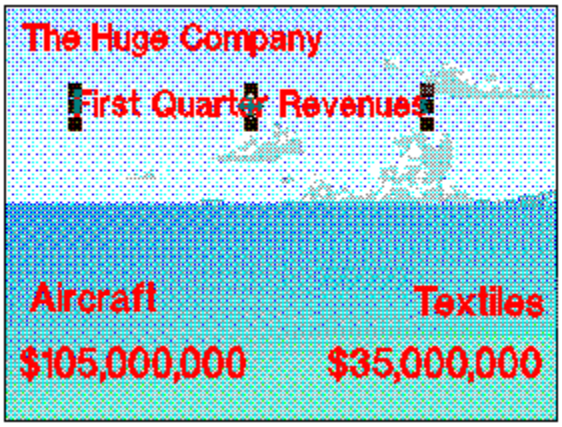

Aircraft
$105,000,000
Textiles
$35,000,000

Aircraft
$105,000,000
Textiles
$35,000,000


Aircraft
$105,000,000
Textiles
$35,000,000


Aircraft
$105,000,000
Textiles
$35,000,000

Aircraft
Textiles
$105,000,000
$35,000,000


The Huge Company
First Quarter Revenues
Aircraft
$105,000,000
Textiles
$35,000,000

The Huge Company
First Quarter Revenues
Aircraft
$105,000,000
Textiles
$35,000,000

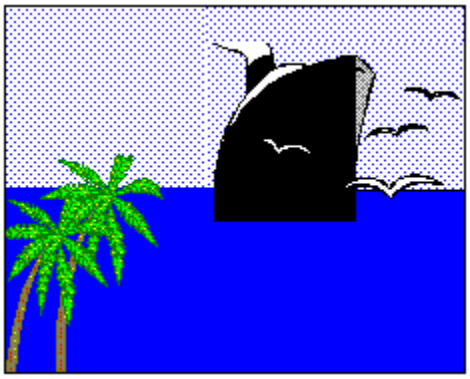
Step-by-Step Tutorial 4
Freeform Drawing

This three-part tutorial will show you how to:

- Use the Line and Curve tools to draw freeform objects
- Stack freeform objects to create a finished image
- Change the line width of an object
- Mix colors using the Hues mixing method
- Flip an object
-

Freeform Drawing Preview

TUTORIAL 4
PREVIEW



From the previous tutorials, you already know how to:

- Place and size objects
- Duplicate objects
- Rotate objects
- Color objects
- Block select and Group objects
- Align objects
-

Open a New File

If you are continuing from the previous tutorial, use the New command.

1. Pull down the File menu and choose New. You will be prompted to save any changes made to the open document since the last save.
2. The previous window is cleared, and a new blank work area is displayed.

Set the Target Printer and Page Layout

Each time you start Draw, you should check the page and printer setup and change them if desired. This ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the File menu and select Print Setup.
2. Change the orientation to Portrait and then click OK.
3. Then select Page Setup from the File menu and select Use Printer Page, Get Printer minimums and Normal. Then click OK.
4. Pull down the View menu and choose Actual Size view for the purposes of this tutorial.

Review this idea in Tutorial 1.

Divide and Conquer

As you begin to work on more complex documents, you may find it useful to create individual segments of the document and then place them together to produce the finished illustration. In this tutorial, we've divided the document into three parts: creating the backdrop, drawing the ship, and adding the finishing elements.

Part 1: Create the Backdrop

The backdrop for the illustration shows the sea and sky.

It is composed of three clip-art symbols: a rectangle for the sky, a rectangle for the sea, and a rectangle used as a frame around the image.

Add and Size a Rectangle Using the Shapes Tool

1. In the Toolbox click on the Shapes tool . The rectangle drawing cursor appears. Watching the numeric bar at the bottom of your screen, drag it to about 3.75 inches Width and 1.25. inches Height.

   Click once with the outside mouse button to dismiss the cursor.

2. Once drawn, the size of the rectangle can be made more precise. Selecting one of the middle object handles allows you to size in one dimension.

   Select a middle handle. Then, while holding down the mouse button, use the arrow keys. Each time you touch the arrow key, the size changes by one-hundredth of an inch.

3. Move the rectangle to the top center of the work area.

Color Symbol Using Color Mixing

1. Click on the Color style button in the Style bar.
2. Click on the Define button. The Define Color dialog box appears.
3. Choose Blue from the Named Colors list.
4. The color mixing bars at the upper right of the dialog box should be labeled 240 Hue, 0% White, and 0% Black.
5. Drag the scroll button in the % White mixing bar to set the percentage to 88%. You can click on the arrows at the end of the mixing bar to increase and decrease the percentage in 1% increments. You can also type the value in the window.
6. Since we want to apply the mixed color only to the interior of the rectangle, make sure the Beg Fill is checked and the Line Attribute is not checked. Click on Apply. The rectangle acquires the new color.

Duplicate and Position the Symbol

1. Select the Duplicate tool from the Toolbox.
2. Click on the light blue rectangle and drag the duplicate slightly away from the original.

   Click once with the outside mouse button to dismiss the cursor.
3. Hold down the Shift key and click on both rectangles. Both objects are now selected.
4. Hold down the Ctrl key and press N on your keyboard. The Align dialog box appears.

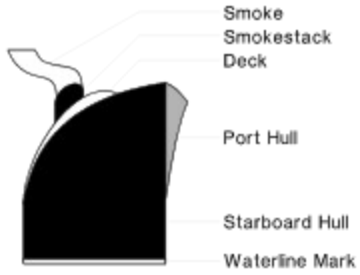
   Place a check in the Center align box of both Top to Bottom and Left to Right.

   Click on Apply. One rectangle now completely conceals the other.
5. Since both rectangles are identical, select either one of them. "Shape-rectangle" appears in the object viewer in the Style bar. Move the duplicate by dragging it so that its top about marries the bottom of the other rectangle.

6. With the lower rectangle selected, pull down the Define menu menu, choose Color, and change the fill color to Blue. (You may need to scroll far up to reach this color.)
7. Choose the Block Select tool from the Toolbar and drag the resulting cursor around both rectangles. Hold down the Ctrl key and press G on your keyboard to group the objects.
8. Use the cursor to highlight the word Group in the object viewer window in the Style bar. Type sea and sky and press Enter. The group is renamed, with G>sea and sky appearing in the viewer window.

Part 2: Draw the Ship

Although computer graphics can be drawn like traditional paper-and-ink graphics, it is common to create a computer image as a set of separate and distinct objects that are then sized and positioned relative to each other. In the case of the ship, there are six different pieces:



Draw the Smoke

To make room for drawing, choose Current Page from the View menu.

1. Select the Curve tool from the Toolbox. The Pointer changes to the Curve tool.
2. Drag the curve tool to draw a curved line similar to the one shown, then release the mouse button.

See Example

Special Note

If you are unfamiliar with computer drawing or with using a mouse, your sketch may not closely match the illustration. Don't panic. As you become more experienced, you'll be able to draw quickly and accurately. Until then, there's still no problem: you can easily adjust any line or curve to the shape desired.

3. Select the Line tool from the Toolbox. The Pointer changes to the Line tool.
4. Place the Line tool on the endpoint of the curved line. Hold the Shift key and drag the Line tool to draw a horizontal line to the right. Release the mouse button and the Shift key.

See Example

Holding down the Shift Key

Holding the Shift key while you draw a line lets you draw exact horizontal and vertical lines. If you do not hold the Shift key, you can draw straight lines in any direction.

5. Choose the Curve tool again. Draw a curved line from the end-point of the horizontal line.

See Example

6. To complete the smoke, choose the Line tool again and draw a line between the two remaining endpoints.

See Example

Edit the Smoke

1. Check the Style bar. It should read "Closed shape." If it does not, select the Edit tool .
   Select one endpoint and drag it on top of the other end-point to join them.

See Example

2. Click the content menu button once to cancel the drawing tool and start editing the shape. The cursor changes from the Line tool to the Edit tool.

See Example

3. You can select any point handle and drag it to reshape the object if needed.

Using Point Handles

If there is no point handle where you would like to make an adjustment, choose Add Handle from the Draw menu. The Edit tool changes to the Add Handle tool; point on a line or curve and click to add a handle. Pressing F5 is a shortcut that does the same thing.

4. Click on a point handle. (If you don't see any handles, click on to show them. You can drag control points to reshape curves.

See Example

5. If there are unneeded point handles on the shape, you can delete them. Click on a point handle to select it and choose Clear from the Edit menu or just press the Delete key on the keyboard.

6. When you are done adjusting the shape, click the content menu button. The cursor changes from the Edit tool to the Pointer, and object handles appear around the object.

Set Object Attributes

1. Click the Fill style button with the content menu button and change the fill to Solid.
2. Click the Color style button and change the fill color to White.
3. Click the Line style button with the content menu mouse button and change the line width to 0.5 points.

   HINT: One way to change the appearance of type is to change the line width. Select the text and change the line width just as in this step.

Create the Remaining Ship Components

Using the techniques learned by drawing the smoke, draw the rest of the shapes that make up the ship. Draw the shapes at any size desired; later you will resize the shapes in relation with each other.

1. Use the Line tool and Curve tool to draw the smokestack shape.
2. Use the Curve tool to draw the deck shape.
3. Use the Line and Curve tools to draw the starboard hull shape.
4. Use the Line and Curve tools to draw the port hull shape.
5. Create the waterline mark by clicking once on the rectangle from the Shapes flyout. Drag the lower right handle down to create a long, narrow rectangle.

Color the Ship Components

1. Select the smokestack shape and change the fill color (under) to Black.
2. Select the starboard hull shape and change the fill color to Black.
3. Select the port hull shape. Select the Color style button and change the fill color to Blue with 37% Black added.
4. Select the waterline mark shape. Select the Color style button and change the fill color to Red with 50% Black added.

Size the Ship Components

Resize the shapes by selecting them and dragging corner handles. Don't worry about precision at this point; just approximate the size of each shape in relation to the others.

Position the Ship Components

Move the shapes into their correct positions relative to each other. When in place, resize shapes as needed to make them fit properly.

You will likely need to make use of the following two commands in the Arrange menu:

Bring to Front Ctrl+F
Send to Back Shift+F

Bring to Front places the selected object on the top of all other objects. Send to Back places the selected object behind all others.

When the ship is complete, use the Block Select tool to select all of the shapes and Group them (press Ctrl+G). Size and position the ship on the backdrop.

Part 3: Add Finishing Elements:

1. Add the birds by drawing one with the Curve tool .
2. Change the fill color to White, using the Color Style button .
3. Size the object and place it on the backdrop. Add other birds by using the Duplicate tool .

Add the Trees

Remember that the Clip-Art Manager is the primary resource for the images you want. If the image you want is part of a larger clip-art image, it can be extracted from it.

1. Call up the Clip-Art Manager by clicking on the Clip-Art Manager tool .
2. Scroll through the Collections to find Scenery/Landscapes. Choose the Scene-Jungle image from that collection.

See Example

Add the image to a blank part of your drawing area. Ungroup it by holding down the Shift key as you press G on your keyboard.

3. Click among the images until you see G>Coconut Tree in the object viewer. Drag this image to the lower left of your drawing and delete the rest of the Scene-Jungle images.
4. Use the Duplicate tool to create a second tree.

   For the part of the tree that extends beyond the background frame, you can either select the bottom middle object handle and pull it upward, or you can place a rectangle with a Fill and Line of white over the extending part.
5. If you don't like the direction the tree is facing, you can flip it. Pull down the Arrange menu and select Flip <> to flip the tree horizontally.

   (The other Flip command inverts objects vertically.)

Add the Text

1. Click on the Word tool in the toolbox. The Enter/Edit Words dialog box appears.
2. Type

   Island Cruise Lines

   The Best Vacation Ever!

   Click on Add. The Pointer changes to the Add Object cursor.
3. Hold the mouse button and drag a bounding box at the lower right of the illustration to size the text.
4. Release the mouse button to add the text, then change the fill color to Black.
5. Save your completed illustration by pressing F9. In the resulting Save Document As dialog box, give your work the filename cruise.GED.

   Be sure to place a checkmark in the Include Thumbnail box. Doing so will provide a small "preview" picture in the Open dialog box the next time you highlight the filename.

Tutorial 4 Review

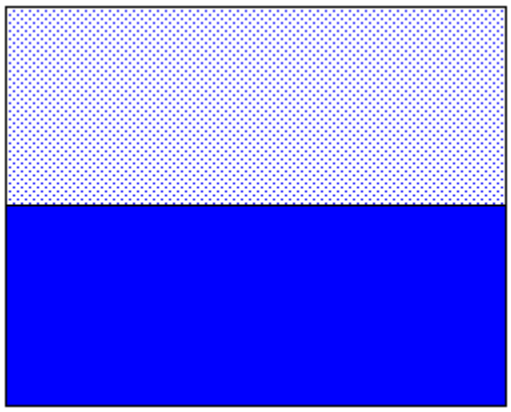
This tutorial showed you how to:

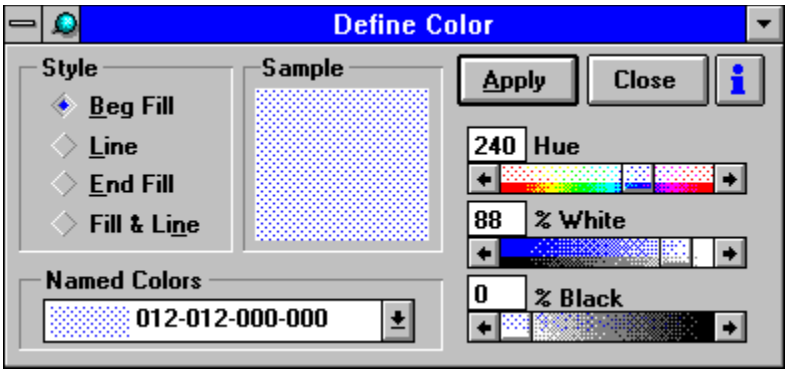
- Use the Line and Curve tools to draw freeform objects
- Stack freeform objects to create a finished image
- Change the line width of an object
- Mix colors using the Hues mixing method
- Flip an object

To begin the next tutorial, pull down the Tutorials menu and choose 5 Style Bundles.

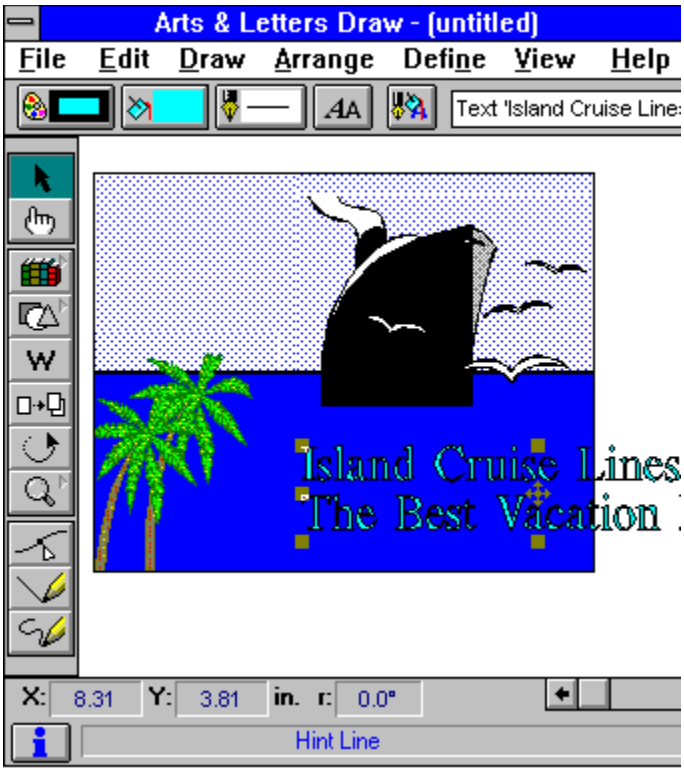
Freeform Drawing Review

TUTORIAL 4
REVIEW




Define Color
Style
Beg Fill
Line
End Fill
Fill & Line
Sample
Apply
Close
240 Hue
88 % White
0 % Black
Named Colors
012-012-000-000

ClipArt
Collections
Images
Thumbnails
Add
Save
Close
Collection:
16 Opened
Scenery/Landscapes
Image Name:
15 Available
Scene-Jungle


Arts & Letters Draw - (untitled)
File Edit Draw Arrange Define View Help
Text 'Island Cruise Lines
Island Cruise Lines
The Best Vacation
X: 8.31 Y: 3.81 in. r: 0.0°
Hint Line

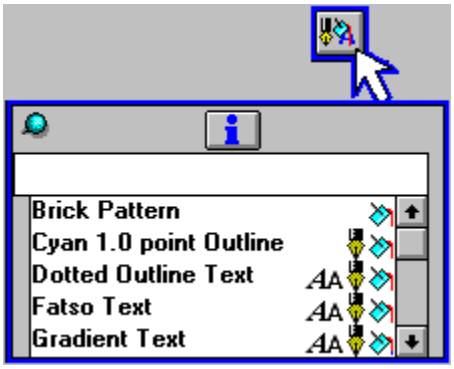
Step-by-Step Tutorial 5
Using Style Bundles

This tutorial shows you how to:

- Use Style Bundles
- Save and Apply styles to objects
-

Using Style Bundles Preview

TUTORIAL 5
PREVIEW



From previous tutorials, you should know how to:

- Open Draw documents
- Add symbols and text to a document
- Choose a fill pattern
- Choose line types and widths
-

Open a New File

Open the drawing from the last tutorial.

1. Pull down the File menu and choose Open.
2. Select the filename cruise.GED and click on OK. The file opens and its images display on your screen.

Set the Target Printer and Page Layout

When you open a document in Draw, the page settings saved with that document become effective.

However, you should make a habit of checking the page and printer setup and changing them if desired. Doing so ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the File menu and select Print Setup.
2. Change the orientation to Portrait and then click OK.
3. Then select Page Setup from the File menu and select Use Printer Page, Get Printer minimums and Normal. Then click OK.
4. Pull down the View menu and choose Actual Size view for the purposes of this tutorial.

Review this idea in Tutorial 1.

Set Viewing Level

Pull down the View menu and verify that the viewing level is Actual Size.

Understanding Style Bundles

The Style bundles button provides a number of ready-made effects that you can quickly add to objects in your Draw document.
All that is necessary is to select an object, then click on the Styles button. The effects in the scrolling list are applied to the selected object when you click on the style name.
Although ready-made, you should not think of these styles in a fixed way. Rather, use the style as a starting idea. For example, apply a style for its gradient of color, then go back to the object and change the line thickness using the Line style button.

Apply Styles

If you are not using the drawing created in the previous tutorial, any object added to your screen (using the Shapes tool, for example) can illustrate Style changes.

1. In the cruise ship drawing, select the "sea and sky" object. G>sea and sky appears in the object viewer.
2. Break apart the group by holding down the Shift key and pressing G on your keyboard.
3. Select the rectangle representing the sky. Shape-rectangle appears in the object viewer.
4. Click on the Style bundles button and scroll in the list to the Sunset background style. The pouring bucket icon tells you that it is a Fill style. Click on the name and the image of the sky acquires the new fill pattern.

Click here to identify all object viewer icons.

Saving and Applying Styles

The styles of one object are easily applied to other objects.

1. Select the rectangle with the Sunset background Fill style.
2. From the Define menu click on Save to save all its style attributes.

   -or-

   Hold down the Ctrl key and press R on your keyboard.
3. Select another object. Click on Recall in the Define menu, or just hold down the Shift key and press R.

   The style is applied to the object.

Tutorial 5 Review

This tutorial showed you how to:

- Use Style Bundles
- Save and Apply styles to objects
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Congratulations!

You have completed
the Draw Step-by-Step Tutorials.

Using Style Bundles Preview