



# StyleWare TopDraw™



**TopDraw by  
Robert A. Hearn and  
Jeff G. Erickson**

**User's Manual  
by Dale Crawford  
and Pat Dames**

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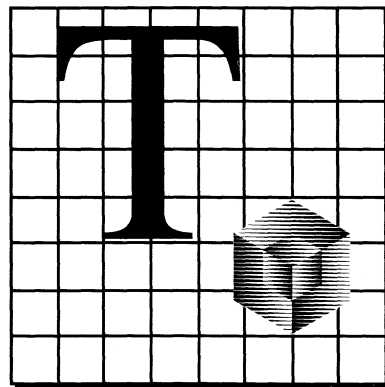
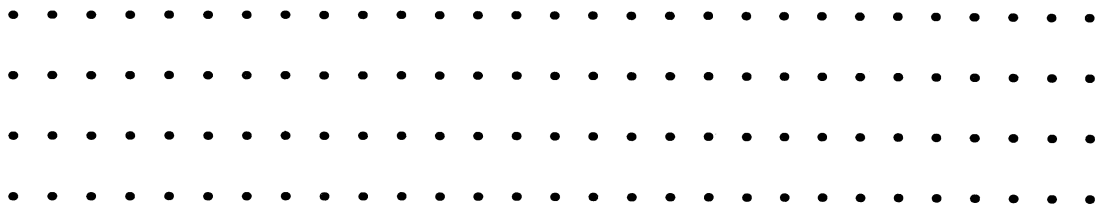
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**TopDraw**



User's Manual



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## About This Manual

This manual explains how to use TopDraw, the object-oriented graphics program for the Apple IIGS. Chapter One, "Before You Begin," explains what you need to know and what equipment you need before starting up your TopDraw program disk. In addition, it explains what object-oriented graphics are, how they differ from bit-mapped graphics, and how this difference benefits you.

Chapter Two, "Learning TopDraw," begins with an introduction to the basic elements of the TopDraw environment and explains in detail each of the tools you'll use in creating drawings. The second half of this chapter consists of a self-paced tutorial lesson, which shows you how to use many of TopDraw's graphics tools to create a sample party invitation.

Chapter Three, "Using TopDraw," provides detailed instructions for creating and modifying various shapes, patterns, and colors. This chapter includes step by step instructions for each major drawing task you can perform with TopDraw. If you're familiar with object-oriented graphic programs, you may want to skip Chapter Two and continue with this chapter.

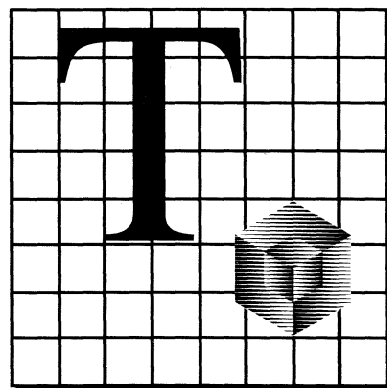
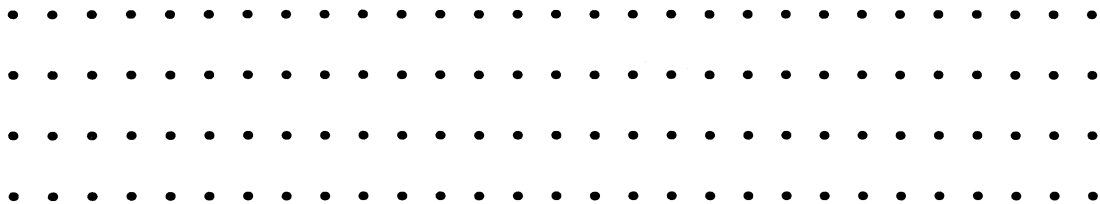
Chapter Four, "TopDraw Reference," contains a summary of all the tools, menus, and commands in TopDraw. This chapter also includes a list of the original TopDraw program defaults, and instructions for installing TopDraw on a hard disk drive. Refer to this chapter when you need a detailed description of a particular TopDraw command or if you need to know about the preset program options.

This manual concludes with a Glossary, which contains definitions of important terms used throughout the manual, and a special Quick Reference Card which you can place beside your computer as you use the program.

# Chapter 1



## Before You Begin



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## Introduction

This chapter will give you an understanding of what you'll need to begin using TopDraw. There's an explanation of what hardware you'll need, as well as some concepts which you'll want to understand before using TopDraw. Finally, there's an explanation of **object-oriented drawing**, the shape-based illustration system used by TopDraw, as well as a discussion of the advantages of object-oriented graphics over conventional bit-mapped "paint" programs for extensive graphic work.

## Getting Started

There are many ways to learn how to use TopDraw. The method with which you feel most comfortable is obviously the best one, but we'd like to recommend that at some point you carefully read the entire TopDraw manual. Here are several methods that you may choose:

- Read the entire manual, making note of the important features of TopDraw.
- Read Chapter One, "Getting Started," and Chapter Two, "Learning TopDraw."
- Use your knowledge of another object-oriented drawing program to understand the basic concepts in TopDraw.
- Start experimenting on your own. (Many people enjoy this almost as much as a good game program.) Be sure, however, to refer to this manual if you have any questions.

## System Requirements

To use TopDraw, you'll need an Apple IIGS with a monitor and a mouse, a 3.5-inch disk drive, and at least 512K of memory. Memory expansion cards from a number of manufacturers can be used to increase the amount of memory available for use with your Apple IIGS. TopDraw can take advantage of any additional RAM (beyond the minimum requirement of 512K) that you've installed in the memory expansion slot of your IIGS, allowing you to create larger documents. Be sure that the speed option on your IIGS control panel is set at Fast to ensure that TopDraw runs at its optimum operating speed.

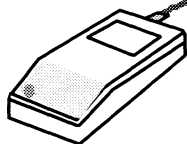
## Backups

Because TopDraw is copy-protected, you may want to obtain a backup copy of the program. You can get a backup of TopDraw for a small fee by contacting StyleWare at either of the product order phone numbers listed in the inside back cover of this manual. Both protected and unprotected backups are available to registered TopDraw owners.



## Things to Know

### Using the Mouse



There are several things that you'll want to know to use TopDraw to its full potential:

It's essential that you understand how to use the mouse to use TopDraw. If you haven't read your *Apple IIGS Owner's Manual*, be sure to read it before using TopDraw. Also, it will be helpful for you to read your *Apple IIGS System Disk User's Guide*. To learn all about using the Apple IIGS mouse, run the tutorial disk that came with your Apple IIGS (*Your Apple Tour of the Apple IIGS*), or run the mouse tutorial program on the *MousePaint* disk that comes with the AppleMouse II. You'll want to be sure to understand basic mouse operations such as **pointing**, **clicking**, and **dragging**.

### ProDOS 16

To use the file management features of TopDraw most effectively, you'll want to have a working knowledge of ProDOS 16, the disk operating system under which TopDraw runs. To clearly understand ProDOS 16, be sure to read your *Apple IIGS System Disk User's Guide*.

### Important Terms

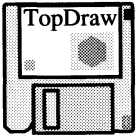
Before using TopDraw or reading this manual further, it's important that you understand several familiar words that are being used in this manual in specific ways with regard to TopDraw.

An **object** is any shape drawn with any of TopDraw's tools. These shapes may be ovals, rectangles, rounded rectangles, lines — even text. TopDraw regards all objects as geometric figures, which is what allows you to move, reshape, duplicate, group, lock, and delete objects; it also allows you to **overlay** objects by placing one object on top of another. TopDraw can always remember the shape of an object (and therefore quickly redraw the object) because the shape is defined as a mathematical "formula."

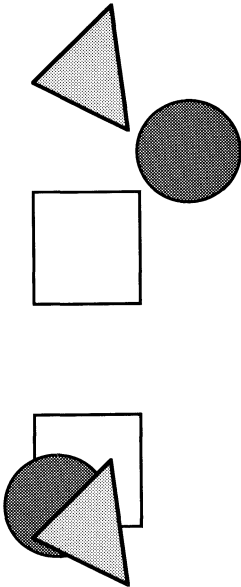
A **document** is any drawing that you create at one time with TopDraw.

A **command** is any instruction you give your Apple IIGS which causes it to perform a specific task. In TopDraw, you execute commands by choosing them from **pull-down menus** or by typing **keyboard equivalents**, key combinations which, when pressed, perform the same task as choosing a command from a menu.

## If There's a Problem With Your TopDraw Disk



## Object-Oriented Drawing



In rare instances, there may be a physical problem with your TopDraw disk. If you suspect that such a problem has occurred with your TopDraw disk, contact StyleWare's Technical Support Department at the number listed on the inside back cover of this manual.

Everything that you draw in TopDraw is in the form of objects, mathematically defined shapes which can be manipulated more precisely and effectively than the **bit-mapped graphics** of paint programs, which create images by allowing you to change the color of individual dots on the computer screen.

The shapes you draw with bit-mapped graphics programs are comparable to free-hand drawings that you produce with a pen or paint brush, with dots on the screen as your paint or ink. There are limitations to this approach: for example, if you cut out a shape in a bit-mapped program, a hole appears where the shape had been; if you change a shape in a bit-mapped program, you can't easily restore the shape to its former dimensions.

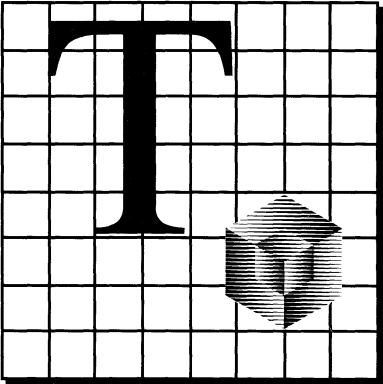
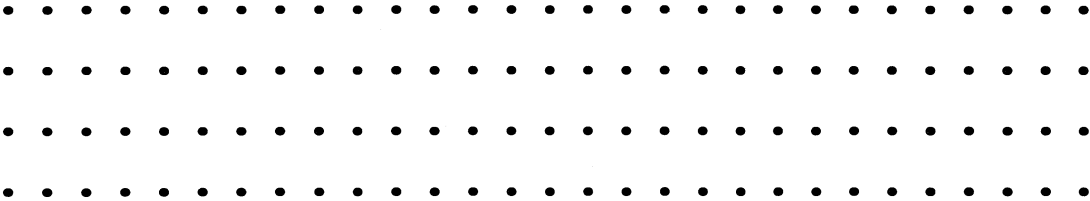
Object-oriented graphics, on the other hand, can be compared to cutting out pieces of paper and combining them to form drawings, except that with TopDraw, your drawings can be much more detailed than if you used scissors, construction paper, and glue. An object may be a line, rectangle, oval, arc, polygon, text, or a freehand shape. Any of the drawing tools that you use will create an object, and many of the commands in the menus will allow you to edit or change the object. Once an object has been created, it can be reshaped, resized, and duplicated quickly and easily; you can change the width of its border and its color and pattern with just a few mouse clicks.

You're now ready to begin learning and using TopDraw. The next chapter, "Learning TopDraw," shows you how to start up TopDraw, explains the TopDraw drawing environment, and includes a short tutorial lesson to make sure you understand the basics of creating graphics with TopDraw. Chapter Three, "Using TopDraw," provides step by step instructions for using TopDraw's many powerful graphic-editing features. If you have questions about using a specific command, refer to Chapter Four, "TopDraw Reference."

# Chapter 2



## Learning TopDraw



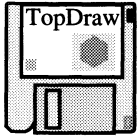
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## **Introduction**

Chapter Two will familiarize you with the basic concepts that you'll need to know to use TopDraw. If you've used MacDraw™ or another object-oriented drawing program, then you may already know some of the concepts involved in using TopDraw. This chapter will make sure that you know about the TopDraw environment and how to use all of TopDraw's powerful drawing tools, and then guide you along step by step as you create your first drawing with TopDraw.

## Starting TopDraw



To start TopDraw, you'll first open it from the Program Launcher.

- **Insert the TopDraw disk, metal end first and label side up, into your 3.5-inch disk drive.**
- **Turn on your Apple IIGS and your monitor.**

The Apple IIGS Program Launcher appears. You'll use the Program Launcher to open TopDraw.

- **Click the program name "TopDraw" to choose it from the list in the Program Launcher dialog box.**
- **Click Open.**

The desktop clears, temporarily replaced by a blank screen titled `"/StyleWare.TD/TopDraw."` After a few moments, this screen clears and the TopDraw desktop appears.



## The TopDraw Desktop

The **menu bar** contains the names of the pull-down menus from which you choose commands.

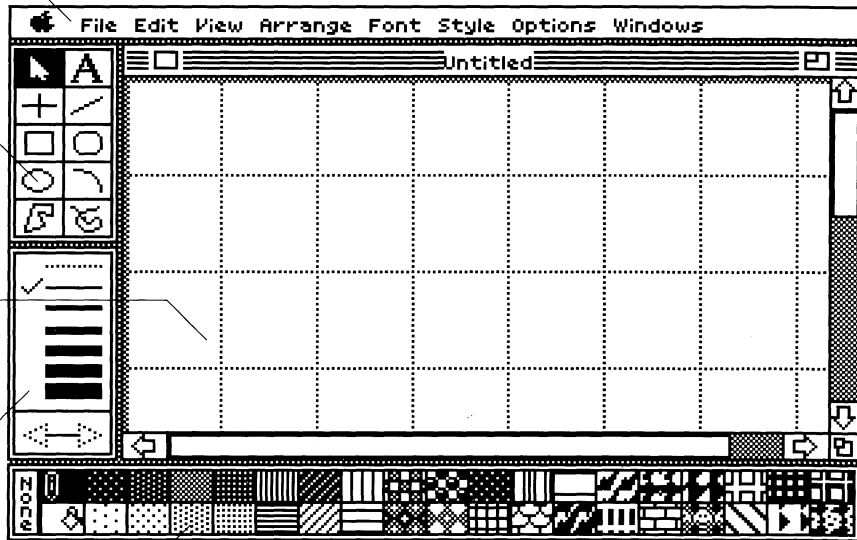
The **tool palette** contains ten tool icons that let you choose the tools you need to create different types of objects.

The **document window** is the area in the TopDraw screen in which you create drawings.

The **line palette** contains a number of different line widths from which you can select line sizes for the outlines of your objects.

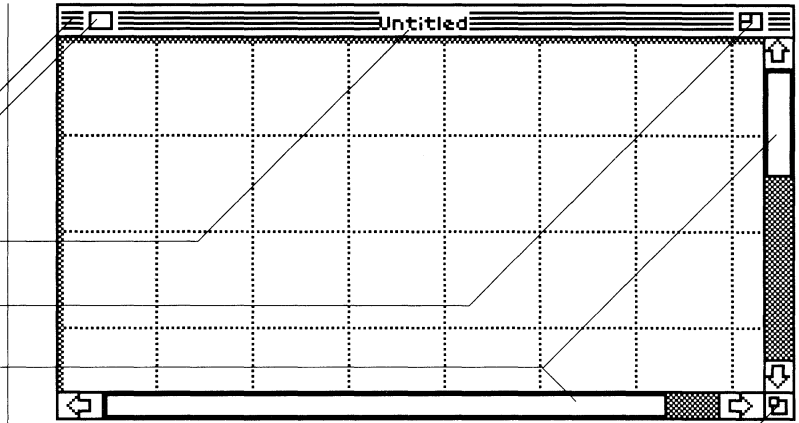
The **pattern palette** contains the color patterns that you can use to draw and fill your objects.

The TopDraw desktop contains the tools that you'll use to create colorful drawings in the **document window**. The document window is the area in which you can draw with TopDraw.



## The Document Window

- The title bar
- The close box
- The title
- The zoom box
- The scroll bars
- The size box



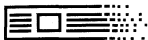
### The Title Bar

The **title bar** is the rectangular area at the top of the document window that contains the name of your document, or "Untitled" if the document hasn't been named.



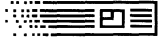
### The Title

The **title** is the name you give to a document; it appears in the center of the title bar. If you've not yet named your document, the document's given the name "Untitled." It's not a good idea to actually name a document "Untitled," because you might not know if the document has been saved or not.



### The Close Box

The **close box**, located on the left side of the title bar, is used to tell TopDraw to put the current document away without having to choose Close from the File Menu. Clicking the close box closes the document and clears the document window from the TopDraw desktop. If you've made any unsaved changes, TopDraw will let you save the changes before closing the document. Clicking the close box is identical to choosing Close from the File Menu.



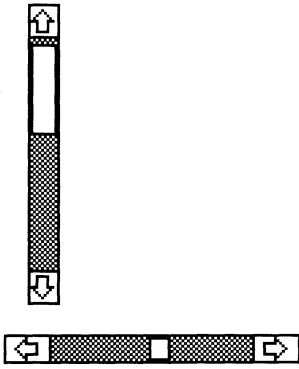
## The Zoom Box

The **zoom box**, located on the top-right side of the title bar, is used to toggle between the regular size of the document window and a full-screen view of the document that you're working on. Click on the zoom box and the document window expands to cover the entire screen; click on it again and the document window contracts to its regular size.

## Scroll Bars

To see the part of your document that's not currently on the screen, you'll use the **scroll bars** located on the right and bottom sides of the document window.

To scroll a document, just press the **scroll arrow** that corresponds to the direction in which you'd like to "move" the document window over your document. The white area of a scroll bar, called the **scroll box**, will move in the direction that you press. Each scroll box represents the part of the document currently displayed in the document window, and shows you its proportional size and position relative to the entire document, which is represented by the entire scroll bar (which includes the grey area as well as the scroll box).



25 objects ( 0 selected)

## The Information Bar

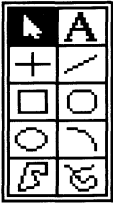
If you've chosen the Show Document Info command, you'll see a box called the **information bar** at the top of the document window that indicates the current number of objects in your document, the number of selected objects, the amount of free memory in your computer, and the current view scale of your document.

## The Size Box

The **size box**, located on the lower-right side of the document window, is used to allow you to change the size of the document window. By dragging the size box, you can increase and decrease the height and width of the document window.



## The Tool Palette



The **tool palette** is the group of ten symbols or **icons** that you see on the upper-left side of the TopDraw screen. You'll use these tools to create objects that you can then combine to form drawings. By mastering the use of each of the different tools, you'll become familiar with the best ways to use them.

You can move the tools anywhere on the screen by placing the arrow pointer tool on the edge of the tool box and then dragging the palette to the desired location on the screen.

### The Arrow Pointer Tool

The **arrow pointer tool**, or selection pointer, is the tool that's active when you start up TopDraw. You can use the arrow pointer tool to select, resize, or drag objects.

### The Text Tool

The **text tool** allows you to place words in your TopDraw documents by creating text objects.

When you select the text tool, the pointer changes to an **I-beam pointer**, which you can place anywhere in the document window. To type text, position the pointer and then click the mouse button. A blinking vertical bar, called the **insertion point**, will appear, allowing you to type in text. When you finish typing, select any other tool, press *return*, or click the pointer elsewhere on the document and the insertion point will disappear. Text may be in one size, one font, and any combination of styles.

Text objects are much like other objects, except that the line pattern must be a solid color pattern to affect the text color. If you select a line pattern that is not a solid color pattern, the text color will be set to the color of the upper left pixel of that pattern as it appears in the pattern editor. Fill patterns affect the background behind the text. Neither the fill nor the line pattern of a text object can be the *None* pattern.



## The Horizontal/Vertical Line Tool

The horizontal/vertical line tool lets you create lines that are always parallel with the horizontal and vertical edges of the drawing window. Like all shapes drawn with TopDraw, these lines are objects.

To draw horizontal or vertical lines, first select the horizontal/vertical line tool. Next, press and hold the mouse button at the place in the document where you'd like to start the line, drag the mouse (holding the button down) to the place where you'd like the line to end, and release the mouse button. The lines that you draw will be constrained to either the vertical or horizontal axis, depending on the direction in which you choose to draw. You can resize a horizontal or vertical line by selecting it and dragging one of its endpoints.



## The Line Tool

With the line tool you can draw straight lines at any angle. These lines will be created as objects in your documents.

To draw diagonal lines in your document, first select the diagonal line tool. Next, click the mouse button at the point in the document where you'd like to start the line, drag the mouse (holding the button down) to the place where you'd like the line to end, and release the mouse button. You can edit a line by selecting it and then dragging one of its endpoints.

You may constrain the line to either 45 or 90 degrees by holding down the *shift* key as you draw.



## The Rectangle Tool

The rectangle tool allows you to draw squares and rectangles.

To draw squares or rectangles in your document, select the rectangle tool, then press and hold the mouse button at the point where you'd like to place one of the corners of the rectangle. Holding down the mouse button, drag to the point where you'd like to place the diagonally opposite corner, and release the mouse button. You can edit a box by selecting it and then dragging any of its handles.

You may constrain a rectangle to a square by holding down the *shift* key as you draw.



## The Rounded Rectangle Tool

The rounded rectangle tool lets you draw squares and rectangles with rounded corners.

To draw a rounded rectangle in your document, select the rounded rectangle tool. Next, press and hold the mouse button at the place where you'd like to place one of the corners of the box. Drag the mouse (holding the button down) to the place where you'd like to place the diagonally opposite corner, and release the mouse button. You can resize and/or reshape a rounded rectangle by selecting it and then dragging any of its handles in the appropriate direction.

You can change the roundness of the corners of a rounded rectangle (before or after drawing it) by using the Corner Radius command.

You may constrain a rounded rectangle to a rounded square by holding down the *shift* key as you draw it.



## The Oval Tool

With the oval tool you can draw circles and ovals as objects in TopDraw documents.

When drawing ovals in your document, keep in mind that ovals, when being drawn, act as if they were invisible rectangles containing ovals. To draw an oval, first select the oval tool, and then press and hold the mouse button at the place where you'd like to place one of the "corners" of the oval. Drag to the place in the document where you'd like to place the opposite (diagonal) "corner" and release the button. You resize and reshape an oval by selecting it and then dragging any of its handles.

You may constrain an oval to a circle by holding down the *shift* key as you draw.





## The Arc Tool

The arc tool lets you draw arcs, which are portions of ovals and circles.

To draw 90 degree arcs (quarter circles or ovals) in your document, select the arc tool and then press and hold the mouse button at the place where you'd like to place the starting point of the arc. Drag to the place in the document where you'd like to place the endpoint of the arc, and release the mouse button. You can edit the size and curvature of an arc by selecting it and then dragging any of its handles. You can also edit the number of degrees an arc spans by selecting the arc and then choosing the Edit Arc Angles command. You can then make the changes by dragging one of the handles on the endpoints of the arc in a circular motion.

If you fill an arc with a pattern other than *None*, it will produce a pie.piece-like object that has a border only on its curved part.

You may constrain an arc to a quarter circle by holding down the *shift* key as you draw.



## The Polygon Tool

The polygon tool allows you to draw objects that have any number of vertices.

To draw polygons in your document, select the polygon tool. Next, press and hold the mouse button at the point where you'd like to place the starting point of the polygon's first line. Drag the mouse to the point where you'd like to place the ending point of the first line and click the mouse button. Move the mouse to the place where you'd like the second line to end and again click the mouse button. Continue in this manner until you're finished with the object. You can end the object at any time by double-clicking at any one point, by clicking outside the document window, or by placing the last point on top of the starting point. You can edit the size of a polygon by selecting it and then dragging any of its handles, or edit its shape by selecting it and then choosing the Edit Polygon Points command from the Edit Menu.

You may constrain the lines of a polygon to either 45 or 90 degrees by holding down the *shift* key while you draw the lines.

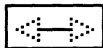


## The Freehand Shape Tool

The freehand shape tool lets you draw objects without any shape limitations, and without any guides (such as the grid) by which to draw them.

To draw free-form shapes in your document, select the freehand shape tool and then move the pointer to the place in the document where you want to start the object. Press and hold the mouse button as you draw the object. When you're finished drawing the shape, release the mouse button. You can edit the size of a freehand object by selecting it and then dragging any of its handles, or edit its shape using the Edit Polygon Points command.

## The Line Palette



The **line palette** is the rectangular area on the lower-left side of the TopDraw desktop which contains seven lines of varying thickness and a box containing a line with arrowheads on either end (the arrowhead selection box). By selecting these lines (the currently selected line is indicated by the check mark), you can change the line size of the objects that you draw. You can also use the line palette to add arrowheads to the ends of the lines of the objects that you draw by selecting arrowheads in the arrowhead selection box.

You can move the line palette anywhere on the screen by placing the arrow pointer tool on the edge of the line palette and then dragging the palette to the desired screen location.

### Line Size

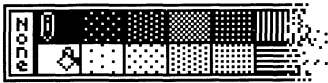
Each of the line sizes in the line palette can be selected by clicking on the desired line. When an object is **selected** (see "Selecting Objects," p.21), a check mark appears in the line palette beside the line size of the object. If several objects with varying line sizes are selected, or if the object's line size has been edited with the Line Size command to create a non-standard line size (one not offered in the line palette), the check mark will disappear. For more information on changing line size, see "Line Size...", p. 150.

### Arrowheads

The box containing a line with arrowheads on both ends is the **arrowhead selection box**. To add arrowheads to the lines of any **open object** (objects that have two endpoints that don't overlap), click either the left or right arrowhead. Selecting the left arrowhead will add arrowheads to the left side endpoints of selected objects; selecting the right arrowhead will add arrowheads to the right side endpoints of selected objects; selecting both arrowheads will add arrowheads to both endpoints.

To add arrowheads to a previously drawn object, just select that object and then use the arrowhead selection box.

## The Pattern Palette



The **pattern palette** contains the patterns with which you'll draw your objects. With the tools in the pattern palette, you can change the fill and line patterns that your objects use.

You can move the pattern palette anywhere on the screen by placing the arrow pointer tool on the edge of the pattern palette and then dragging the palette to the desired screen location.

### Patterns

Each of the boxes in the pattern palette contains a **pattern** that you can use as either the **line pattern** or the **fill pattern** of any object. You can edit the patterns in the pattern palette by choosing the Edit Patterns command or by double-clicking on any of the patterns in the palette. Selecting None means you're choosing no fill pattern; objects created or selected when you choose None will therefore appear transparent.

### Colors

The solid colors on the pattern palette are actually patterns made up of dots of only one color. The more multicolored patterns you use, the fewer solid color patterns you'll have in the palette.



### The Pen Icon

The pen icon allows you to choose the line pattern for any object that you might draw.

To change the line pattern of an object, place the pointer over the pen icon and drag it to the pattern that you want to use as a line pattern, or click on the *left* side of the square of the pattern that you want to use. The pen icon will automatically jump to that pattern.

To change the line color of a previously drawn object, select that object and then move the pen icon to the pattern that you want to use.

The pen icon cannot be placed on the None pattern. If you'd like to draw an object with no line pattern, choose the dotted line in the line palette.



## The Paint Bucket Icon

The paint bucket icon lets you choose the fill pattern for any object that you might draw.

To change the fill pattern of an object, place the pointer over the paint bucket icon and drag it to the pattern that you want to use as a fill pattern, or click on the *right* side of the square of the pattern that you want to use (or click anywhere on the None box). The paint bucket icon will automatically jump to that pattern.

To change the fill pattern of a previously drawn object, select that object and then move the paint bucket icon to the pattern that you want to use.

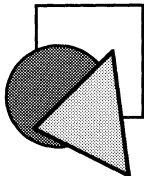
## Selecting Objects



To manipulate or edit an object that you've drawn, you must first **select** it. You can select an object by clicking on it with the arrow pointer tool or by surrounding it with a **selection box** (selection boxes are explained later in this Chapter and in Chapter Three). You can select several objects at once by surrounding them with a selection box or by holding down the *shift* key as you select the objects one at a time.

A selected object can be identified by its handles, the small square blocks that appear at the ends of lines or around the perimeters of other objects. A selected object is affected by any changes made with the menus, the line palette, the pen icon, or paint bucket icon. When you select an object, the pen and paint bucket icons on the pattern palette move to the line pattern and fill pattern of that object, and the check mark moves to the object's line size in the line palette, if the object uses a standard line size (otherwise, no check mark appears in the line palette).

## Overlapping Objects



Any new object that you draw will be at the topmost layer of objects, and will appear in front of any other object that's in the same space. In other words: objects, just like cut-out pieces of paper, can overlap. You may change the "level" of an object using the Bring to Front, Send to Back, Shuffle Up, or Shuffle Down commands.

## Pull-Down Menus and Keyboard Commands



Like other applications for the Apple IIGS, TopDraw uses pull-down menus to let you choose commands.

### ■ Pull down the Edit Menu.

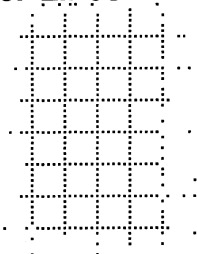
While you have the Edit Menu pulled down, notice that some of the commands have characters displayed to their right. These are called **keyboard equivalents** to pull-down menu commands because they let you use certain key combinations to perform the same tasks as their menu commands.

In TopDraw, keyboard equivalents are also called  $\text{⌘}$ -key commands, because you press the  $\text{⌘}$  key in conjunction with another key to perform a task that you'd normally pull down a menu to execute. To perform the Cut command without pulling down the Edit Menu, for example, you'd hold down the  $\text{⌘}$  key and at the same time press the X key; this command is represented on the Edit Menu by  $\text{⌘X}$ . Pressing  $\text{⌘X}$ , then, is equivalent to choosing Cut from the Edit Menu.

## Rulers

The **rulers** in TopDraw allow you to draw with precision and to measure objects and distances on the TopDraw screen. The rulers, which you can display by choosing Show Rulers from the Options Menu, will appear on the upper and left sides of the document window. Small lines will move through the scales of the two rulers as you move the mouse pointer, indicating both the horizontal and vertical positions of the pointer. Using the Edit Rulers command, you can change the increments of the rulers (and set the scale markings to English or metric) to work best with the drawing that you're working on.

## Ruler Lines



The **ruler lines**, which are the small grey lines that form a grid in the document window, help you align objects quickly. The ruler lines can also help you know the current view scale (See "View Menu" in Chapter Four, "TopDraw Reference") of your drawing. As you zoom closer into your document, the ruler lines will appear farther apart, indicating that you're closer to the page.



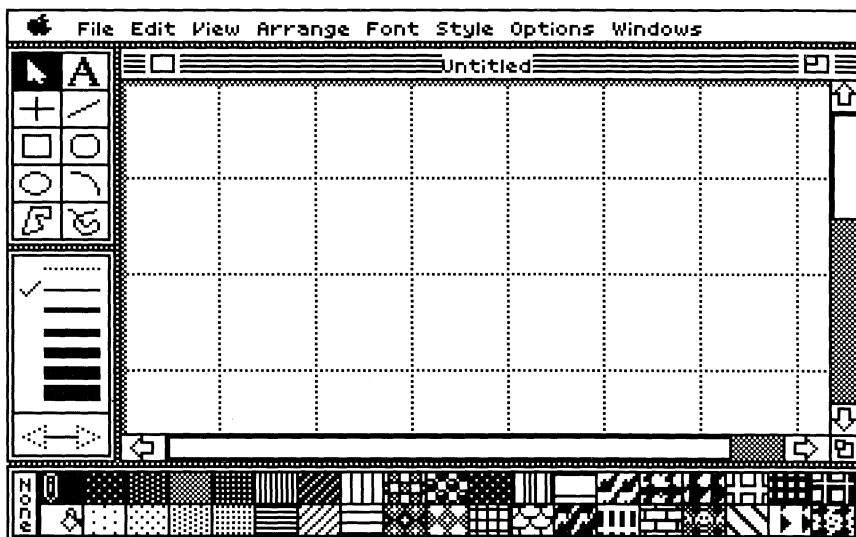
## An Invitation Design

The best way to learn something is to do it, so let's learn about TopDraw by creating a drawing. In this way, you'll learn about most of the tools and techniques needed to produce a drawing by actually using them. The drawing that you'll make doesn't include *all* of the features of TopDraw, so be sure to check Chapter Four, "TopDraw Reference" to learn about all of TopDraw's features.

For your first drawing, let's create an invitation to a party. (Because you'll be doing so much good work with TopDraw, you might as well throw a party to celebrate your new-found creativity!)

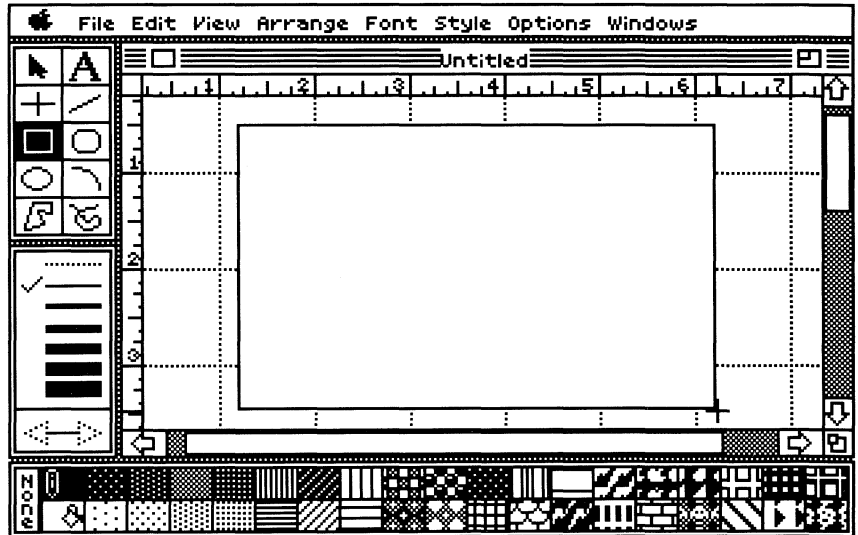
The first thing that you'll need to do to create your invitation is draw an outline for it. To make sure that it's an appropriate size, you'll want to use the rulers.

### ■ Choose Show Rulers from the Options Menu.





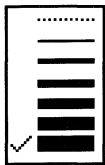
- Select the rectangle tool from the tool palette.
- Use the rectangle tool to draw a rectangle about 5 inches wide by 3 inches tall.



Now let's draw a fancy border for your invitation.



- Select the rounded rectangle tool from the tool box.
- Select the thickest line (the one at the bottom of the line palette) from the line palette.



This will ensure that the border is wide enough to be seen well.

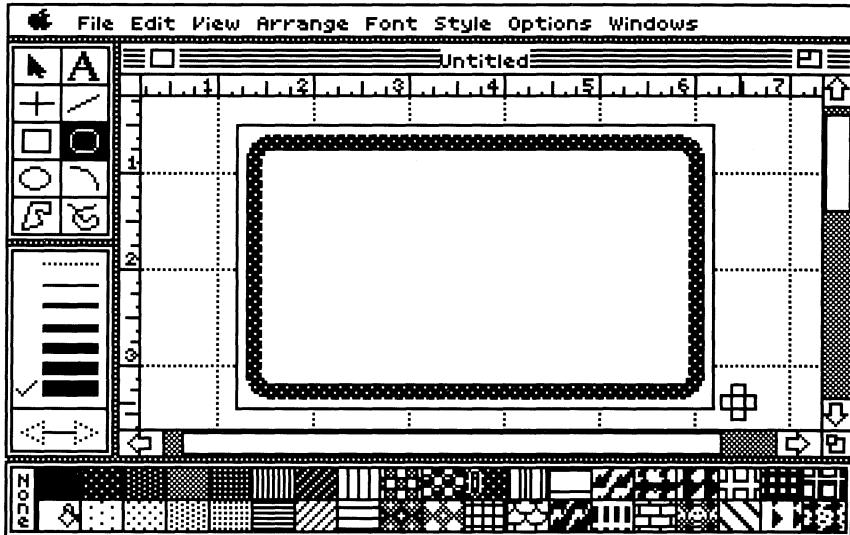


■ Using the pen icon, select your favorite line pattern from the pattern palette.

■ Use the paint bucket icon to select a suitable background (fill) pattern for the invitation.

You should choose a solid-color pattern so that the text will be legible.

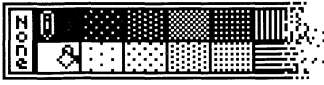
■ Use the rounded rectangle tool to draw a rounded rectangle within the outline that you've drawn.



Now let's draw a gift box.



■ Select a small line size for the gift box.



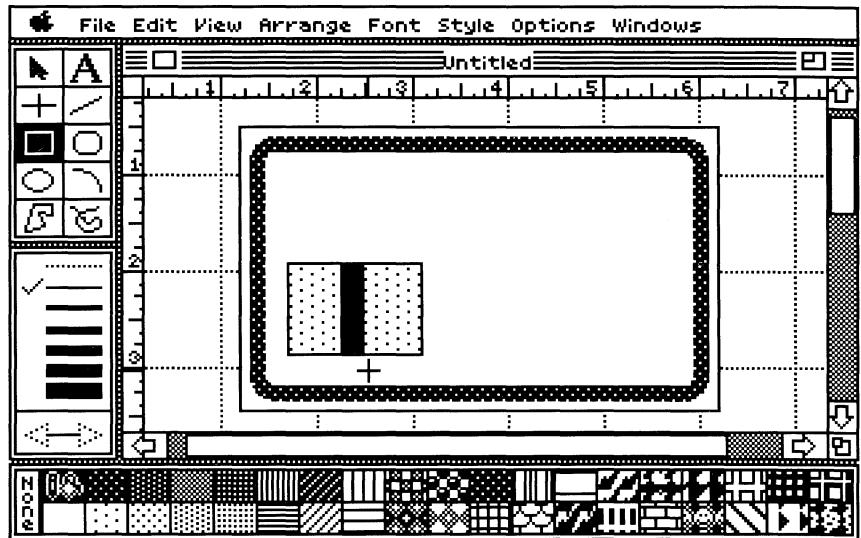
■ Select an appropriate fill pattern for the gift box.

■ Use the rectangle tool to draw an appropriately sized gift box on the left side of the invitation.

Now let's add a ribbon to the gift box.

■ Select a different line and fill pattern.

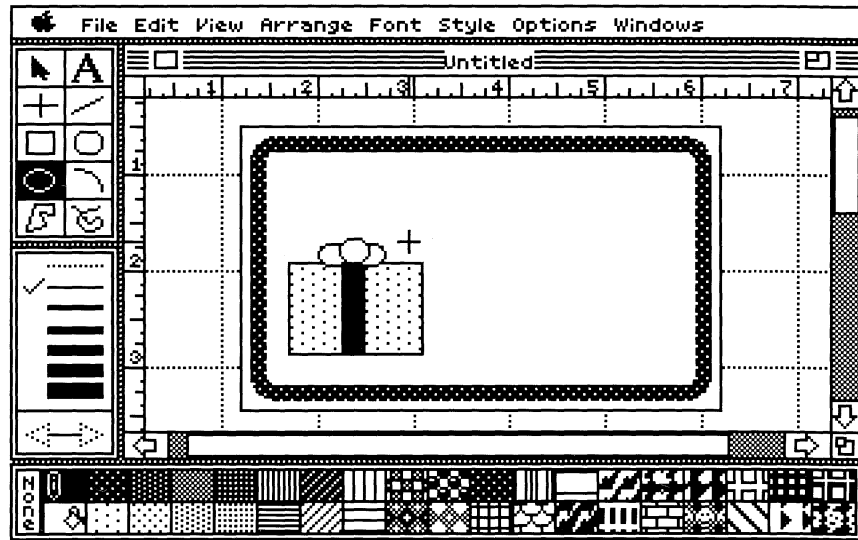
■ Use the rectangle tool to draw a thin rectangle inside the gift box.



Now that you've wrapped your gift, let's put a bow on it.



- Select the oval tool and draw a set of three overlapping ovals at the top of your box.



Since the ovals will probably overlap the box a little, let's bring the box back to the front of the drawing so that the bow appears to be on top of the box.



- Select the arrow pointer tool.

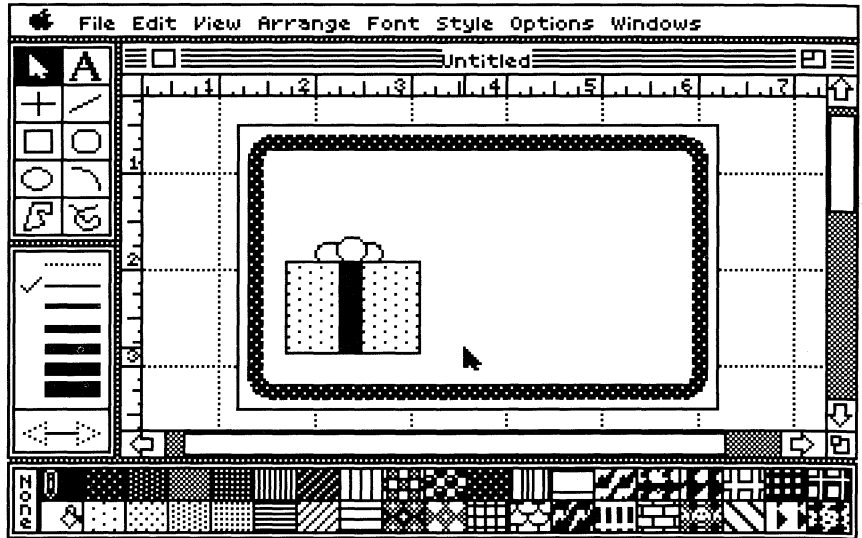
- Place the arrow pointer on the gift box and click the mouse button.

Handles appear around the gift box, indicating that it's **selected**. Clicking on an object with the arrow pointer tool selects an object. Once an object's selected, you can change it or execute a command to affect it in some way.

- Holding down the *shift* key, select the ribbon.

Holding down the *shift* key while selecting allows you to select more than one object at once.

■ Choose Bring to Front from the Arrange Menu.



The gift box and its ribbon are placed on top of the bow, creating the illusion that the bow is on top of the box.

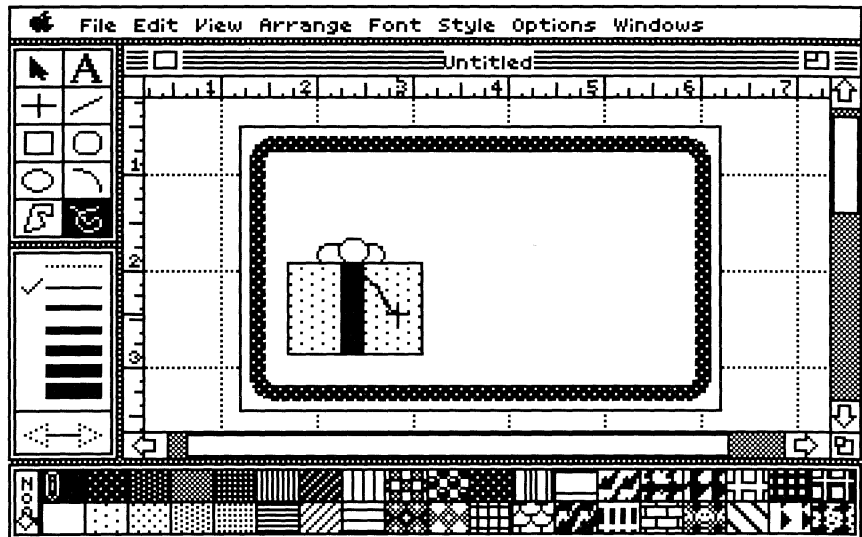
Now that you've got a gift, let's make sure we know who it's for! Add a string on which to place a name tag.



■ Select the freehand tool from the tool palette.

■ Select the black line pattern and the None fill pattern.

■ Use the freehand tool to draw a string that hangs down from the bow to about half of the height of the box.



Now let's add the name tag.



- **Select the polygon tool from the tool box.**

You'll use the polygon tool to create a diamond-shaped tag.



- **Select a white fill pattern with a black line pattern.**
- **Place the crossbar pointer on the string and click the mouse button.**

The place where you clicked becomes the first point in the name tag polygon.

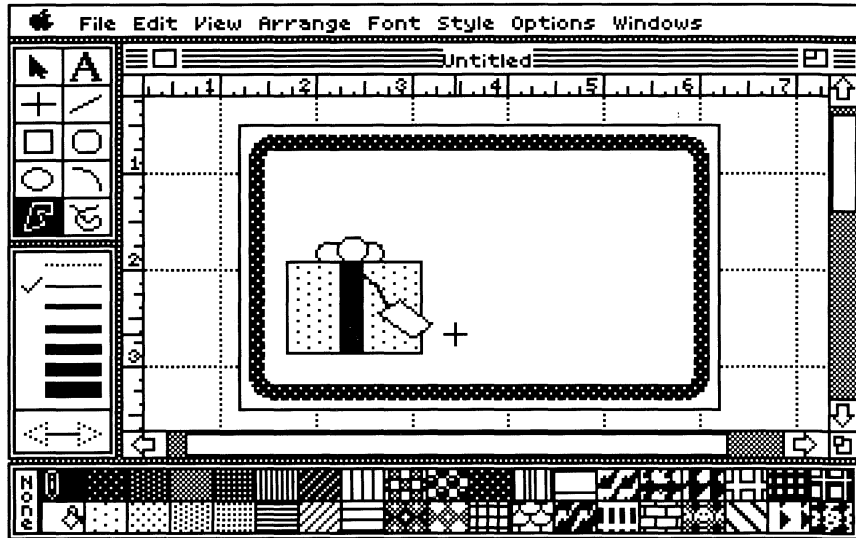
- **Drag the crossbar pointer to the place where you want to put the next point in the polygon.**

As you drag, a line forms between the place where you clicked and the crossbar pointer; this is the first side of the polygon.

- **Click the mouse button again.**

The place where you clicked becomes the second point in the name tag polygon.

- Continue to drag the crossbar pointer and click the mouse button to create the next two points (and the next three sides) in the polygon.
- When you're done, click on the starting point of the polygon.



There's no real reason you should settle for just one gift, is there? To easily make a similar gift box, all you need to do is duplicate the one you've already created and make minor changes to it.

To do this, you'll want to select all the objects which make up the gift box. You've already seen how to select multiple objects simultaneously by holding down the *shift* key and clicking on each object individually. This works fine for one or two objects, but if you have a larger number of objects to select, TopDraw offers an even easier method for selecting: drawing a **selection box** around the objects.



- Place the arrow pointer tool inside the document window but outside and to the left of the rounded rectangle.



- **With the arrow pointer above the objects to be selected, press the mouse button.**
- **Holding down the mouse button, drag diagonally across the objects to be selected.**

As you drag, a dotted rectangle — a selection box — appears. All objects surrounded by the selection box when you release the mouse button will be selected. Be sure to surround only the objects making up the gift box, and not the rounded rectangle.

- **When the selection box completely covers the objects to be selected, release the mouse button.**

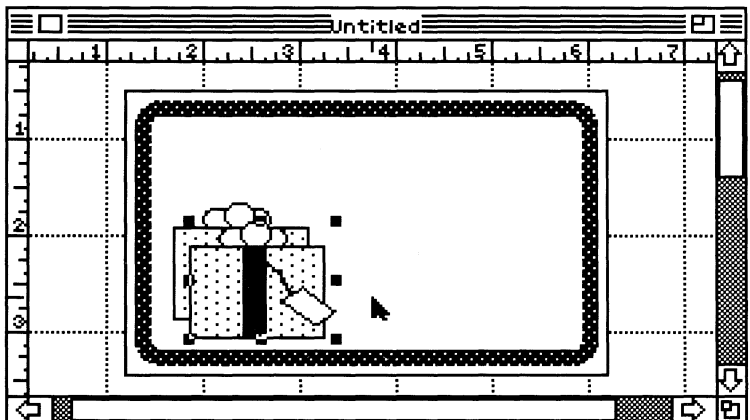
All the individual objects making up the gift box are selected.

- **Choose Group from the Arrange Menu.**

The entire gift box becomes one object! You'll use the Group command whenever you want to treat a number of objects as a single object.

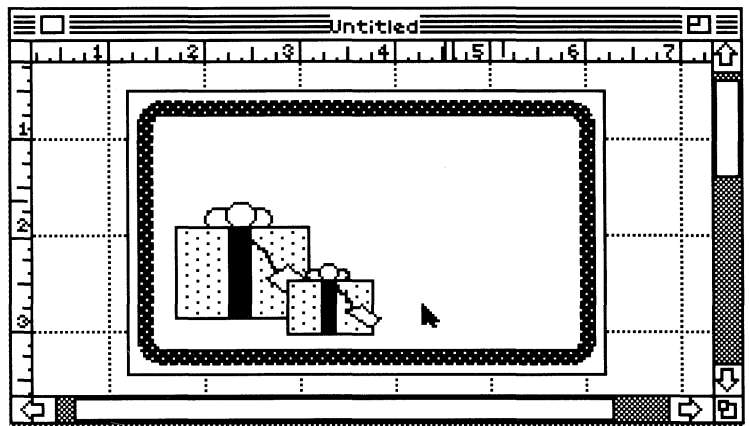
- **With the gift box object selected, choose Duplicate from the Edit Menu.**

A copy of the gift box appears on top of the original.



Now let's make the second gift box look different from the original. Since the duplicate gift box is already selected, you'll just reshape it by dragging its handles.

- **Change the duplicate gift box to a smaller size by dragging one of its corner handles closer to the inside of the object.**
- **Now place your second gift box right in front of the first one.**



So that all your friends will know where your party's being held, you'll need to add some text to the invitation to tell them.

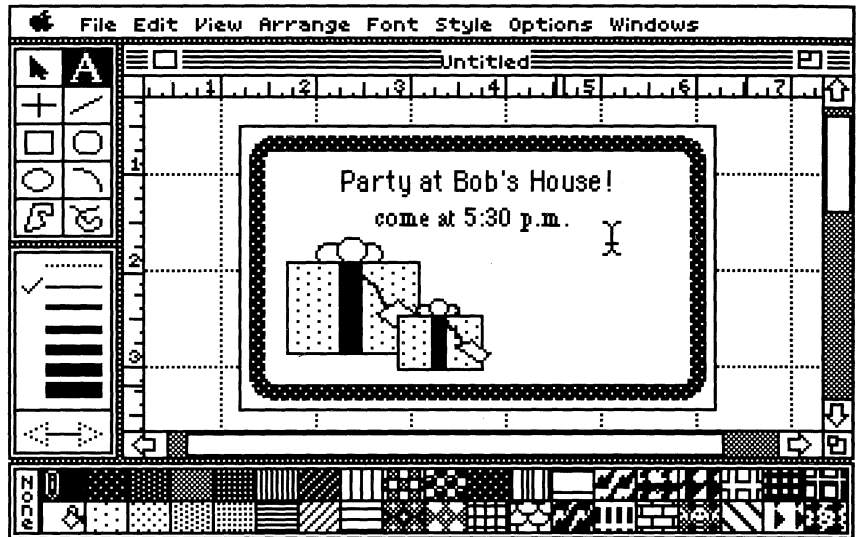


- **Choose the text tool from the tool box.**
- The pointer changes from the arrow pointer to the I-beam pointer.
- **Place the pointer above the gift box, just inside the upper border.**
  - **Click the mouse button.**

A blinking vertical bar, called the **insertion point**, appears in the document window.

■ Type " Party at Bob's House."

■ Now use the I-beam pointer to reposition the insertion point, click the mouse button, and type something about what time you want to hold your party.

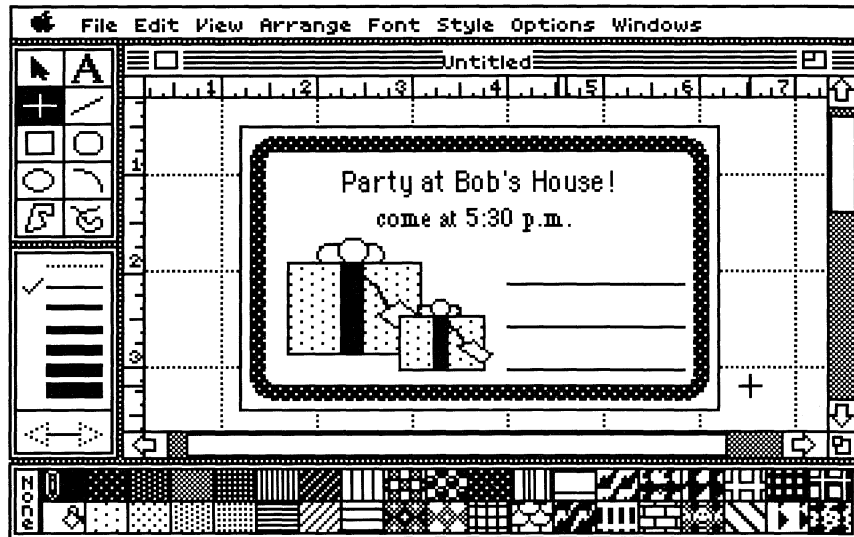


The last thing you'll want to do is add some blank lines where you can write in the name and address of each person to whom you wish to send an invitation.



■ Choose the horizontal/vertical line tool from the tool box.

■ Draw three horizontal lines alongside the gift box that you've drawn.



Now that you've created a masterpiece, you'll want to save it to disk so that you can retrieve it later.

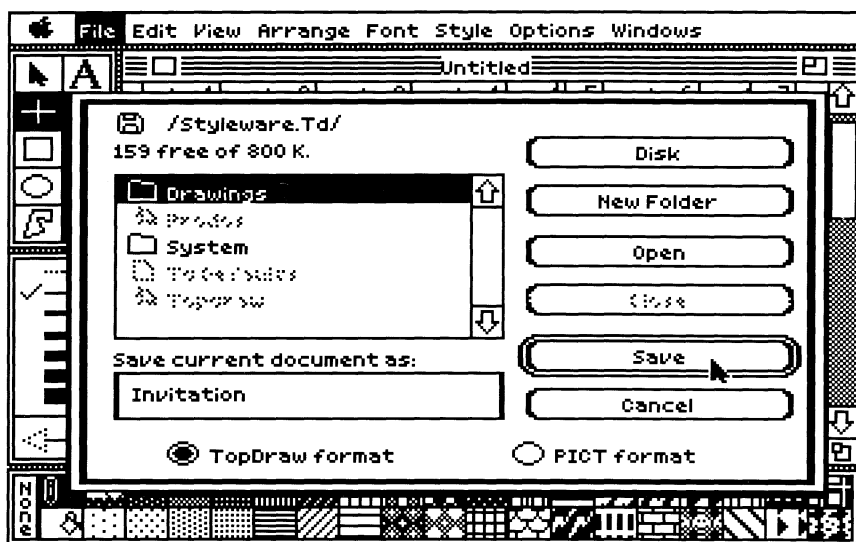
■ **Choose Save As from the File Menu.**

A dialog box appears. The Save As dialog box contains a list of the files and directories on the disk and an input bar where you can type in the name under which you wish to save your document. If you haven't specified a name, this box contains the name "Untitled," which is highlighted (indicating that it's selected) so that you can give it a new name by just typing.

■ **Type a name for your document.**

The new name appears in the input bar.

■ **When you've finished typing a name for the document, click the Save button.**



TopDraw saves the document on disk, and the new name you've given it appears in the title bar.

Now you'll want to print your invitations so that everyone will know about the party.

Before you print the first time, you have to tell TopDraw which printer and printer port you're using with the Choose Printer command.

### ■ Choose Choose Printer from the File Menu.

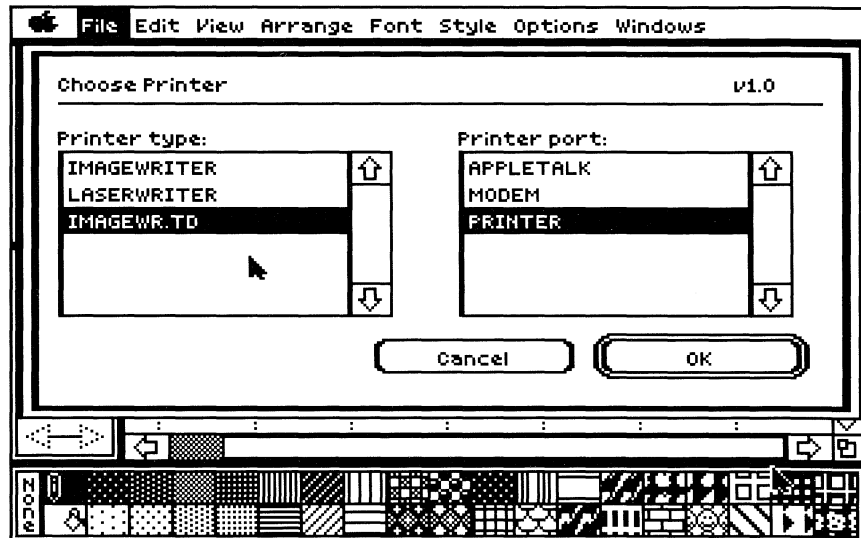
When you choose the Choose Printer command, a dialog box appears with lists for specifying your Printer and Printer Port.

### ■ Click the name of your printer in the Printer type list.

If necessary, scroll the list until the name of your printer appears.

### ■ Click the name of the printer port you're using from the list of printer ports.

If necessary, scroll the list until the name of the printer port you're using appears.



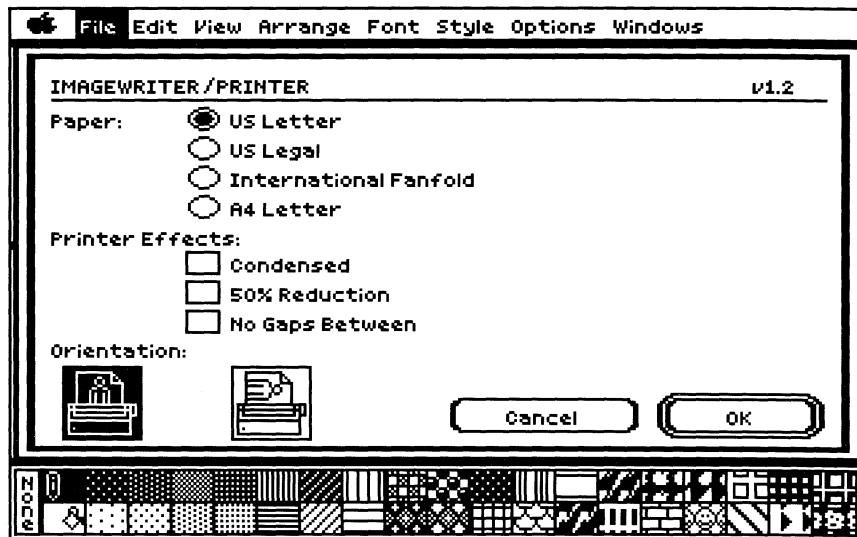
■ **Click OK or press *return*.**

Your printer setup specifications are saved on your TopDraw disk.

The next step in printing a document is to use the Page Setup command to tell TopDraw what size paper you're using and how you want your drawing to appear on the printed page.

■ **Choose Page Setup from the File Menu.**

The Page Setup dialog box appears. The Page Setup dialog box differs depending on whether you're using an Imagewriter, Imagewriter II, or LaserWriter.



The dialog box contains Page Setup options for four different standard paper sizes, special effects (such as 50% reduction and no page feeds between pages), and orientation of print on the page (vertical — **portrait** — or sideways — **landscape** — printing). These options are preset to the settings displayed above. You'll probably want to use these settings, unless you're using a paper size other than US Letter, in which case you'll just want to click on the setting for the paper size you're using.

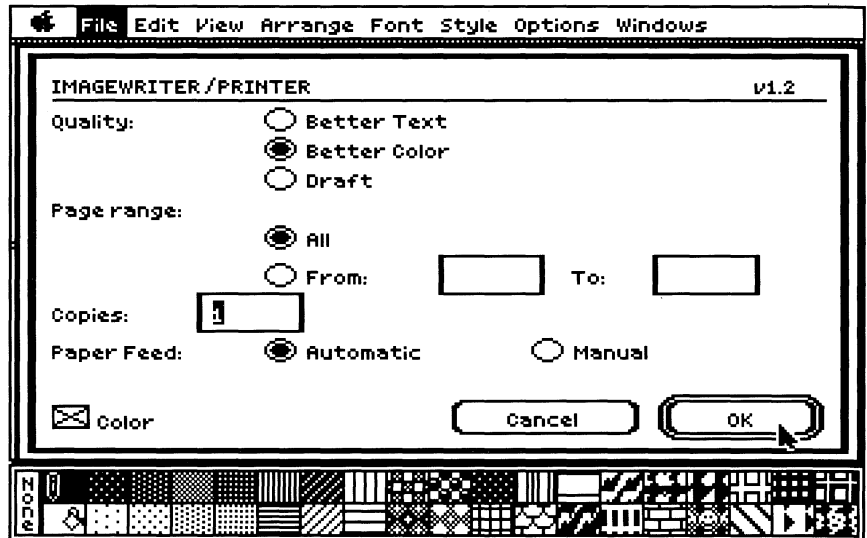
■ **Click OK to confirm these option settings.**

You're almost ready to print! All you have to do now is tell TopDraw how you want your invitation printed.

■ **Choose Print Normal from the File Menu.**

The Print dialog box appears, offering options that let you specify how you want your document printed. The Print dialog box differs depending on whether you're using an ImageWriter, ImageWriter II, or LaserWriter. The instructions below assume you're using an ImageWriter/ ImageWriter II; if you're using a LaserWriter, see "Print Normal" in Chapter Four, "TopDraw Reference."

- Click on the Better Color print quality setting.



Your invitation will be printed with the highest quality dot matrix printing offered by TopDraw.

- Click on the Copies input bar and type "3."

With TopDraw you can print multiple copies of any document.

Now let's tell TopDraw that you want to print in color.

- Click on the Color check box.

An "X" appears in the Color check box, indicating that color printing is selected.

- Click OK or press *return* to confirm these option settings.

The invitation begins to print. When you're done, three copies will be printed.



TopDraw remembers the print settings you specify and confirm for a document, so that you don't have to adjust the print specifications each time you print. Whenever you start up the program or create a new document with New, the print option settings will be the preset options shown above.

Congratulations — you've learned the basics of creating graphics with TopDraw! You'll probably want to experiment with TopDraw a bit to become more comfortable with the program. When you're ready to quit, follow the instructions below.

### ■ Choose Quit from the File Menu.

TopDraw quits and returns to the Program Launcher.

If you've made additional changes to your document since you saved it, or if you opened a new document with New, a dialog box appears to let you save your changes before quitting.

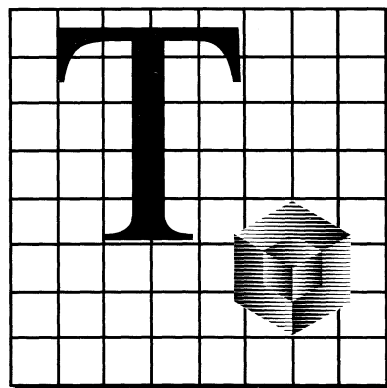
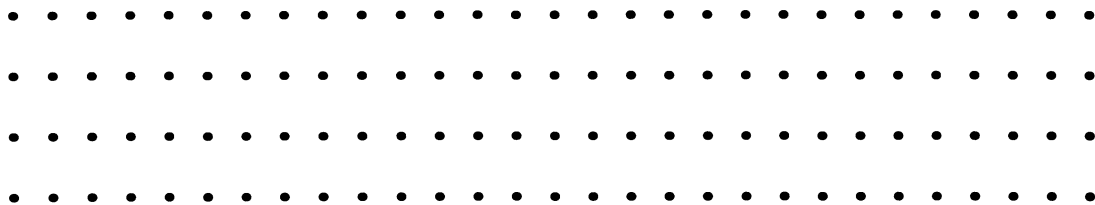
The next time you start up TopDraw, take a look at Chapter Three, "Using TopDraw." This chapter explains in detail all the different graphic processing features TopDraw offers. If you're interested in using TopDraw to do a specific drawing task, look at Chapter Three's Table of Contents or consult the Index at the end of the manual. If you have questions about a specific command — Save As, for example — refer to Chapter Four, "TopDraw Reference."



# Chapter 3



## Using TopDraw



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## **Introduction**


Chapter Three explains how to use most of the features of TopDraw by providing step by step instructions on the basic TopDraw operations. Refer to this chapter as you use TopDraw if you have questions about performing a particular task. For more information on individual commands, refer to Chapter Four, "TopDraw Reference."

## Drawing

The different tools in TopDraw let you create the ovals, rectangles, lines, and polygons that make up drawings. Every object is formed with the current line and fill patterns, but can be modified after it's created if the desired patterns weren't in use when the object was drawn. New objects are automatically placed in front of all other objects as they're created.

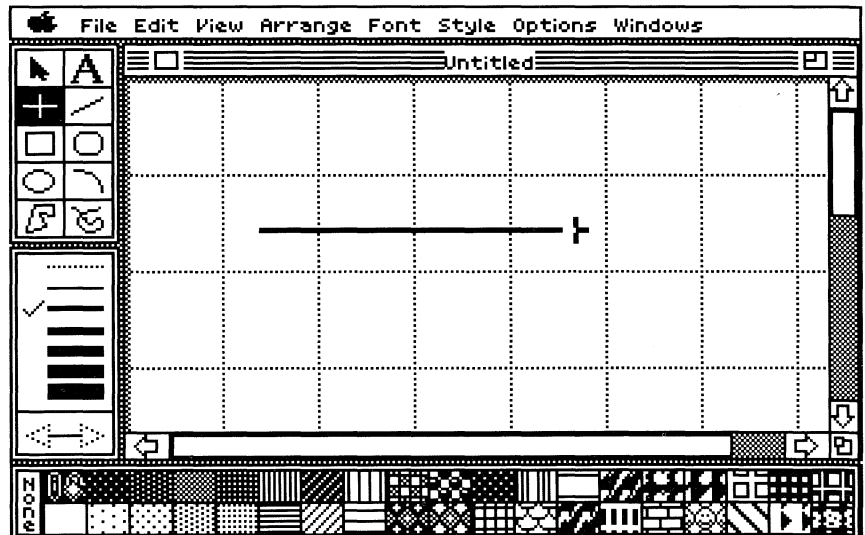
## Drawing Lines

TopDraw lets you draw two different types of lines: horizontal/vertical lines, which are drawn as if on an invisible horizontal or vertical axis; and diagonal lines, which can be at any angle to the invisible horizontal and vertical axes.

 Drawing Horizontal/Vertical Lines

① **Click the horizontal/vertical line tool in the tool palette.**

The tool appears highlighted in the tool palette, indicating that it's the currently selected tool, and the pointer changes to a crossbar pointer.



② Move the pointer to the place in the document where you want the line to begin and press the mouse button.

③ Holding down the mouse button, drag the pointer to the place in the document where you'd like the line to end and release the mouse button.

If you drag the mouse horizontally, a horizontal line appears in the document window; if you drag the mouse vertically, a vertical line appears in the document window.

To edit a line after you've created it, click the arrow pointer tool and use it to select the line. Handles will appear at the endpoints of the line, which you can then drag to increase or decrease the length of the line.



## Drawing Lines

- ① Click on the line tool in the tool palette.

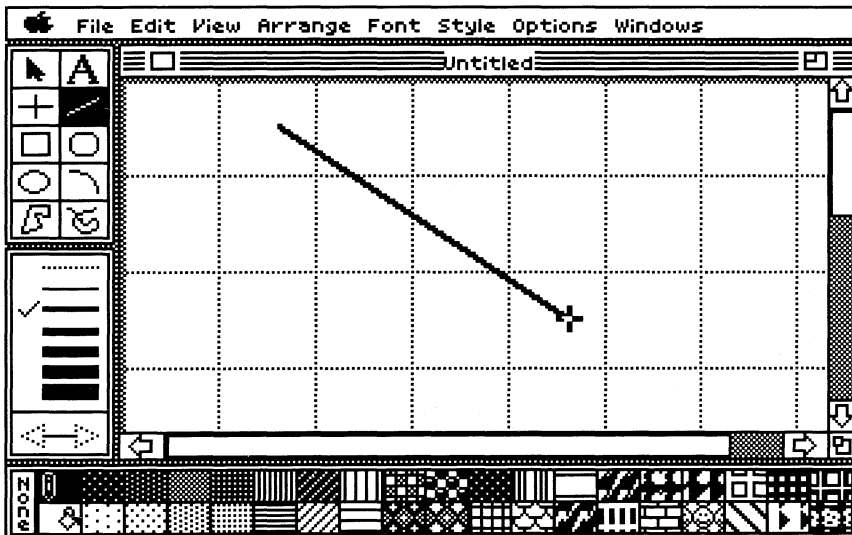
The tool appears highlighted in the tool palette, indicating that it's selected, and the pointer changes to a crossbar pointer.

- ② Move the pointer to the place in the document where you'd like the line to begin and press the mouse button.

- ③ Holding down the mouse button, drag the pointer to the location in the document where you want the line to end and release the mouse button.

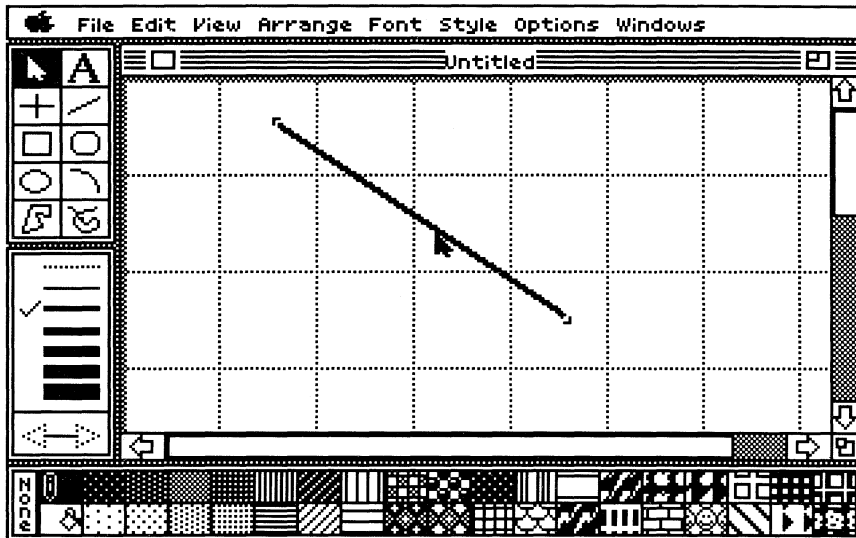
A line appears in the document window.

You can also create horizontal, vertical, and 45 degree angle lines with the line tool by holding down the *shift* key as you draw.





To edit a line after you've created it, click on the arrow pointer tool and use it to select the line. Handles will appear at the endpoints of the line, which you can then drag in different directions to change the length, shape, and angle of the line.



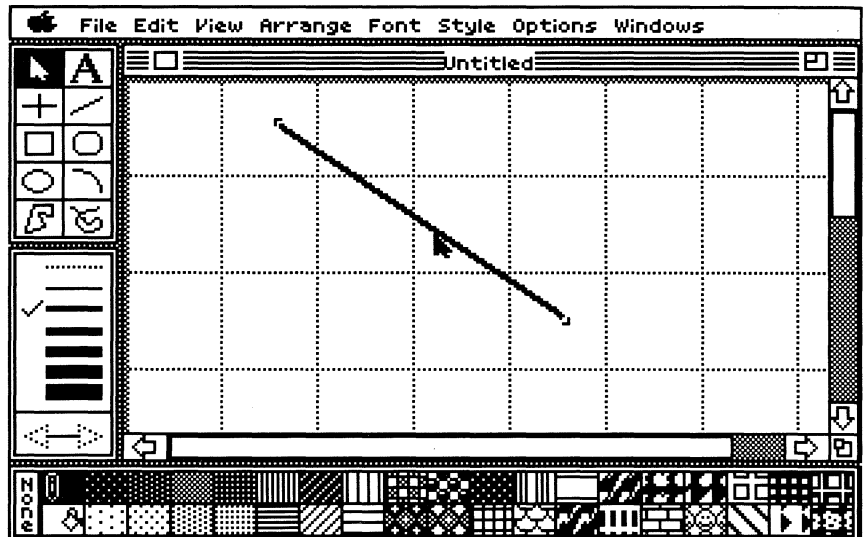


## Adding Arrowheads to Lines

You can draw lines with arrowheads on either or both endpoints using the arrowhead selection box. A line drawn with the arrowhead on the *left* side of the arrowhead box selected will have an arrowhead on its left side endpoint; a line drawn with the arrowhead on the *right* side of the arrowhead selection box selected will have an arrowhead on its right side endpoint. A line drawn with both arrowheads selected will have arrowheads on both endpoints of the line.

① Use the arrow pointer tool to select the line to which you'd like to add an arrowhead or arrowheads.

Handles appear on the endpoints of the line, indicating that it's selected.



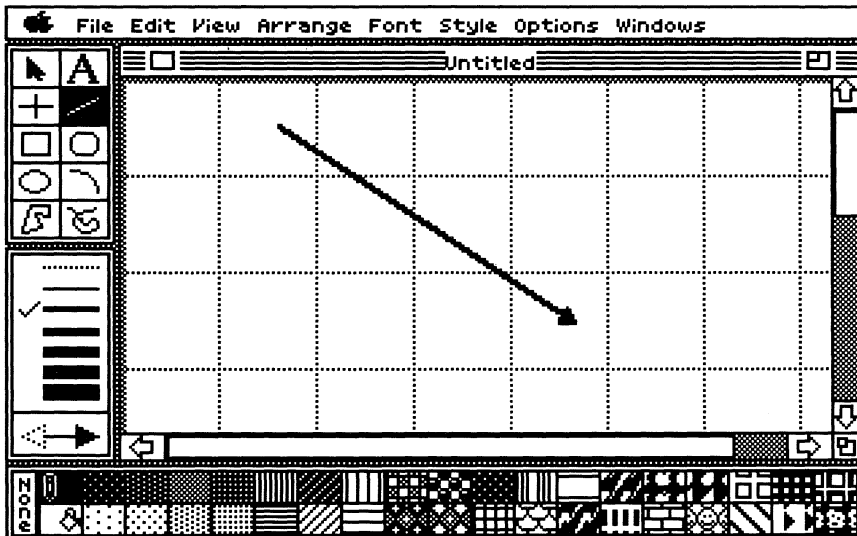
② Click on either the left side arrowhead or the right side arrowhead on the line in the arrowhead selection box.

An arrowhead appears on the specified endpoint of the selected line.

**OR**

■ Double-click on each endpoint of the line to which you'd like to add an arrowhead.

An arrowhead appears on each endpoint on which you double-click.



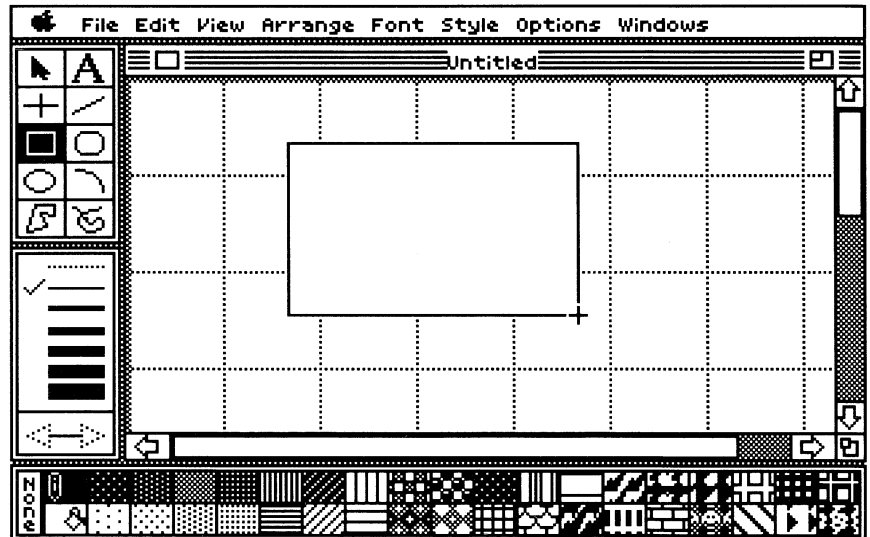
## Drawing Rectangular Objects

There are two types of rectangular objects in TopDraw, both of which are created with their own special tools. You can create rectangles and squares with the rectangle tool; using the rounded rectangle tool you can create rectangles (and squares) with rounded corners.

### Drawing Rectangles

- ① **Click the rectangle tool in the tool palette.**

The tool appears highlighted in the tool palette, indicating that it's selected, and the pointer changes to a crossbar pointer.



② Move the pointer to the place in the document where you'd like to start the rectangle and press the mouse button.

③ Holding down the mouse button, drag the pointer to the place in the document where you'd like the diagonally opposite corner of the rectangle to appear and release the mouse button.

A rectangle appears in the document window.

To create a square using the rectangle tool, hold down the *shift* key as you draw.

To resize or reshape the rectangle, use the arrow pointer tool to select the rectangle. Handles will appear around the rectangle. You can change the size and shape of the rectangle by dragging these handles.



Drawing  
Rounded  
Rectangles

① Click the rounded rectangle tool in the tool palette.

The rounded rectangle tool appears highlighted in the tool palette, indicating that it's selected, and the pointer changes to a crossbar pointer.

② Move the pointer to the place in the document where you'd like the rounded rectangle to begin and press the mouse button.

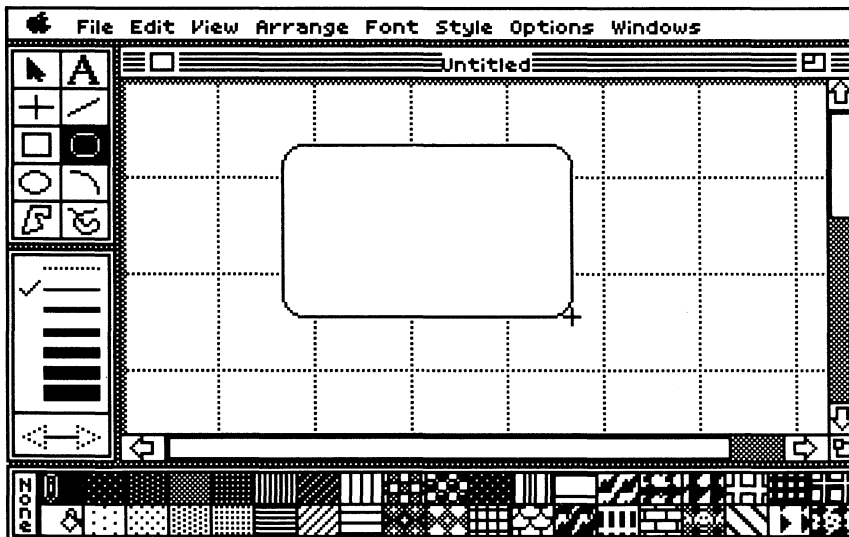
③ Holding down the mouse button, drag the pointer to the place where you want the diagonally opposite corner of the rectangle to appear and release the mouse button.

A rounded rectangle appears in the document window.

To constrain a rounded rectangle to a rounded square, hold down the *shift* key as you draw.

To resize a rounded rectangle, use the arrow pointer tool to select it.

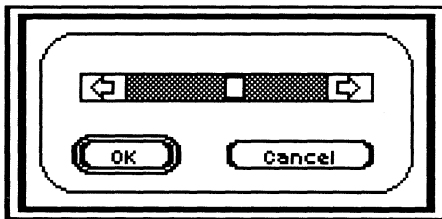
Handles will appear around the rounded rectangle, which you can then drag to change its size and shape.



④ **Adjust the corner radius of the rounded rectangle until it has the desired curvature.**

You can change the roundness of the corners of a rounded rectangle (or, for that matter, of a rectangle) — the **corner radius** of that rounded rectangle — by choosing the Corner Radius command from the Edit Menu. When you choose the Corner Radius command, all rounded rectangles drawn after changing the corner radius will use the new corner radius.

To change the corner radius of an existing rectangular object, select that object and then choose the Corner Radius command. After editing the corner radius with the scroll bar, any selected rectangular objects will change to the new corner radius. For more information on this command, see "Corner Radius" in Chapter Four, "TopDraw Reference."



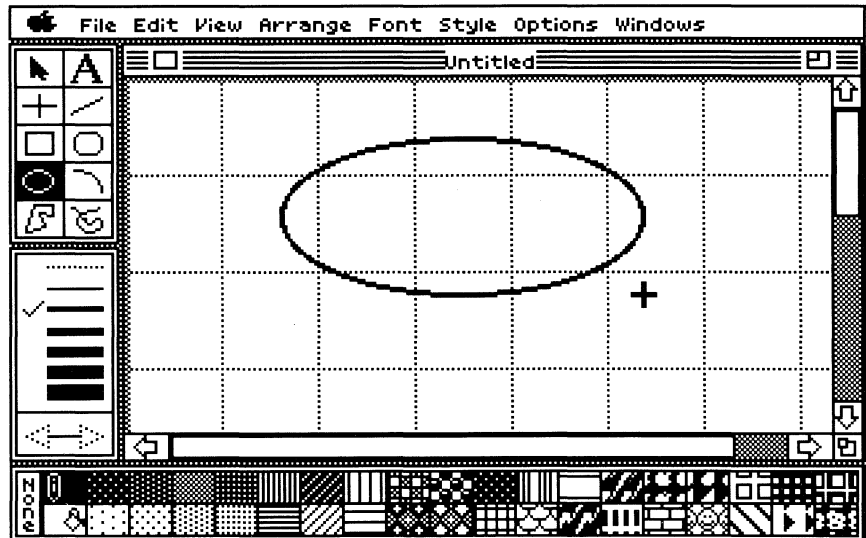
## Drawing Round Objects

There are two types of round objects in TopDraw: ovals (and circles, which are a special type of oval), and arcs, which are portions of ovals. TopDraw provides you with special drawing tools to create both types of objects.



① **Click the oval tool in the tool palette.**

The oval tool becomes highlighted in the tool palette, indicating that it's selected, and the pointer changes to a crossbar pointer.





② Move the pointer to the place in the document window where you'd like the oval to begin and press the mouse button.

③ Holding down the mouse button, drag the pointer until an oval with the shape and size you want appears in the document window.

④ Release the mouse button.

An oval appears in the document window.

To constrain the oval to a circle, hold down the *shift* key as you draw.

To resize or reshape the oval, use the arrow pointer tool to select it. Handles will appear around the oval, which you can then drag to change its size and shape.



## Drawing Arcs

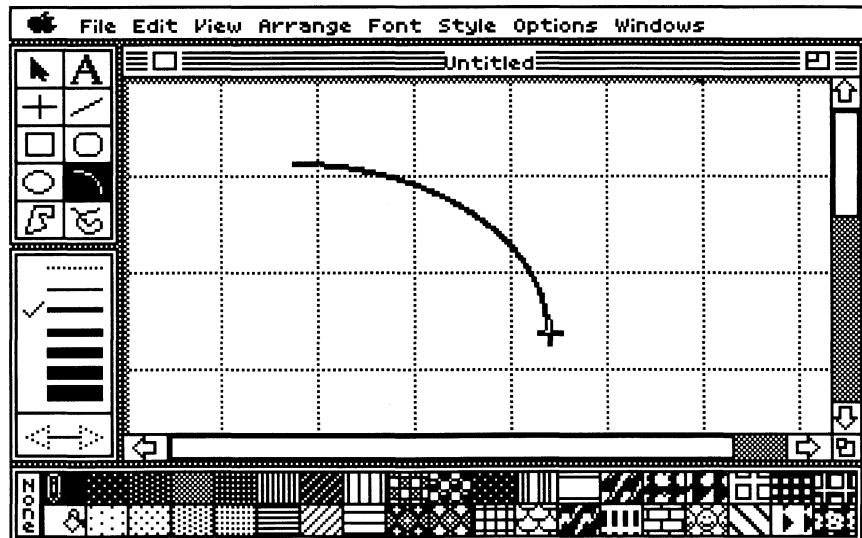
- ① Click the arc tool in the tool palette.

The arc tool appears highlighted in the tool palette, indicating that it's selected, and the pointer changes to a crossbar pointer.

- ② Move the pointer to the place in the document window where you'd like the starting point of the arc to begin and press the mouse button.

- ③ Drag the pointer to the place in the document where you'd like the endpoint of the arc to appear.

The direction in which you drag will determine the curvature of the arc.



④ **As you drag the mouse, watch the arc change in size and shape; when it has the form you want, release the mouse button.**

The arc appears when you release the mouse button.

To constrain an arc to a quarter-circle, hold down the *shift* key as you draw.

To change the number of degrees an arc spans, select the arc and choose the Edit Arc Angles command from the Edit Menu. Handles will appear on the endpoints of the arc. By dragging either of these handles, you can change the number of degrees that the arc spans.

To resize and/or reshape the arc, use the arrow pointer tool to select the object. Handles will appear around the arc, which you can then drag to change the size and shape of the arc.



### Adding Arrowheads to Arcs

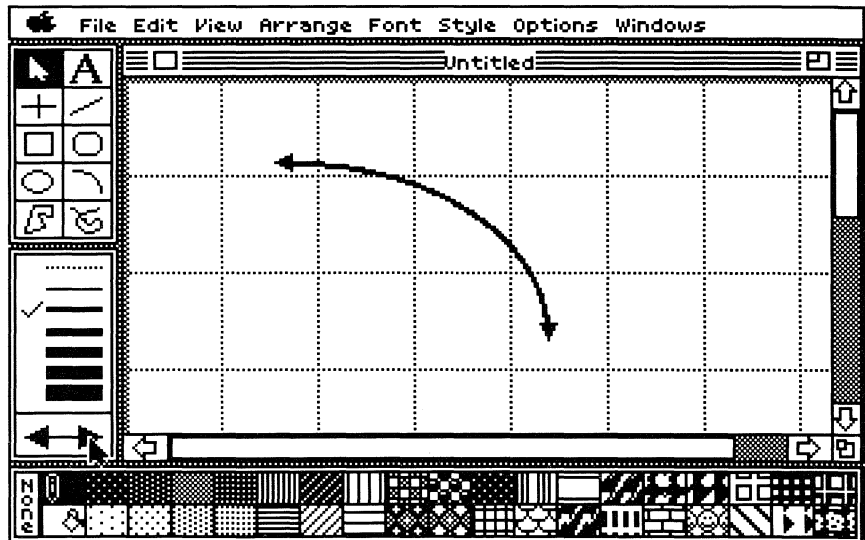
You can use the arrowhead selection box to draw arcs with arrowheads on their endpoints. Any arc drawn with either left side or the right side arrowhead selected will have an arrowhead on that respective end. You can also add arrowheads to previously drawn arcs, by following these steps:

① Use the arrow pointer tool to select the arc to which you wish to add an arrowhead or arrowheads.

Handles appear around the arc, indicating that it's selected.

② Click on either or both of the arrowheads on the line in the arrowhead selection box to add arrowheads to the selected arc.

Arrowheads appear at the specified endpoint(s) of the selected arc.



**OR**

**① Select the arc with the arrow pointer tool.**

Handles appear around the arc, indicating that it's selected.

**② Choose Edit Arc Angles from the Edit Menu.**

Handles appear on the endpoints of the arc, indicating that it's selected and ready to be edited.

**③ Double-click on each endpoint of the arc to which you'd like to add an arrowhead.**

An arrowhead appears on each endpoint of the selected arc on which you double-clicked.

## Drawing Free-Form Shapes

There are two types of free-form objects in TopDraw — polygons and freehand shapes — both of which are created with their own special tools. Polygons are geometric shapes which have a number of **vertices**, or angle points; you create polygons by clicking the mouse each time you want to specify a vertex. A freehand shape appears to be the sort of shape you'd draw with a pen or paintbrush — freehand shapes can have any combination of curves, lines, and angles. In reality, however, TopDraw regards freehand shapes as if they were polygons with a greater number of vertices than polygons you create with the polygon tool. Whereas you specify each vertex with a mouse click when you create a polygon, TopDraw treats each point of a freehand shape as a vertex. This means you don't have to specify vertices when drawing these freehand objects, which creates the illusion that you're drawing them "freehand."



## Drawing Polygons

① **Click the polygon tool in the tool palette.**

The tool appears highlighted in the tool palette, indicating that it's the currently selected tool, and the pointer changes to a crossbar pointer.

② Move the pointer to the place in the document where you'd like to start the polygon and click the mouse button.

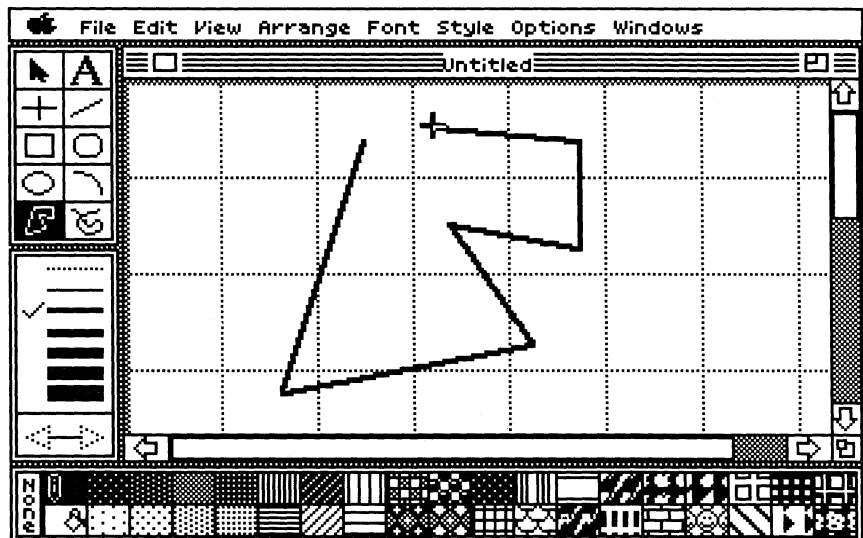
The place where you click becomes the first point in the polygon.

③ Drag the pointer to the place in the document where you'd like the next point of the polygon to appear and click.

As you drag the pointer, a line forms between the first point of the polygon and the pointer. When you click the mouse button, the place where you click becomes the second point of the polygon.

④ Drag the pointer to the place in the document where you'd like the next point of the polygon to appear and click.

The next point of the polygon appears in the place where you click the mouse button.



⑤ **Continue dragging the pointer and clicking in the places where you want the points of the polygon to appear until the polygon is finished.**

You may add as many vertices as your polygon requires.

⑥ **To end the polygon, click directly on top of the starting point, or double-click any other point, or click anywhere outside the document window.**

To constrain the lines of the polygon to 45 or 90 degree angles, hold down *shift* as you draw.

To resize a polygon, select it with the arrow pointer tool. Handles will appear around the polygon, which you can drag to change the size and shape of the polygon. You can also select the object and then choose the Edit Polygon Points command from the Edit Menu; this will cause a handle to appear on each point of the polygon. You can then drag each of the handles individually to more accurately reshape the polygon.





## Drawing Freehand Shapes

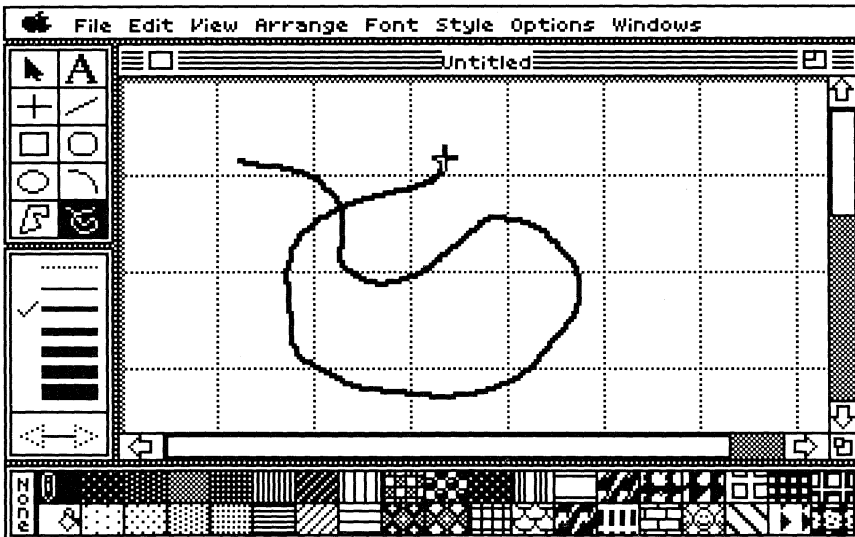
- 1 Click the freehand shape tool in the tool palette.

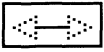
The tool appears highlighted in the tool palette, indicating that it's selected, and the pointer changes to a crossbar pointer.

- 2 Move the pointer to the place in the document window where you'd like to start the freehand shape.

- 3 Drag the pointer to form the shape that you want and release the button.

To resize and/or reshape the freehand object, click on the arrow pointer tool and select the object. Handles will appear around the object, which you can drag to different locations to modify the shape. You can also select the object, then choose the Edit Polygon Points command from the Edit Menu; this will cause a handle to appear on each point of the shape. You can then drag each of the handles individually for greater accuracy in reshaping the freehand object.





## Adding Arrowheads to Open Objects

An **open object** is an object which has two endpoints; the interior of the object is thus *open* to the drawing area.

An object can appear to be closed when it is actually open — this will happen, for example, if you create an open object and then edit it by placing one endpoint on top of another. However, an object that is created as open will always remain an open object, and an object that is created closed will always remain a closed object.

Because it's possible to create polygons, arcs, and freehand shapes that are open objects, TopDraw allows you to add arrowheads to the ends of such open shapes. Only open objects can have arrowheads; closed objects cannot.

① **Use the arrow pointer tool to select the open object.**

Handles appear around the object, indicating that it's selected.

② **Click on either one or both of the arrowheads on the line in the arrowhead selection box.**

An arrowhead will appear at the specified endpoint(s) of the selected open object.

**OR**

- ① **Select the appropriate open object with the arrow pointer tool.**

Handles appear around the object, indicating that it's selected.

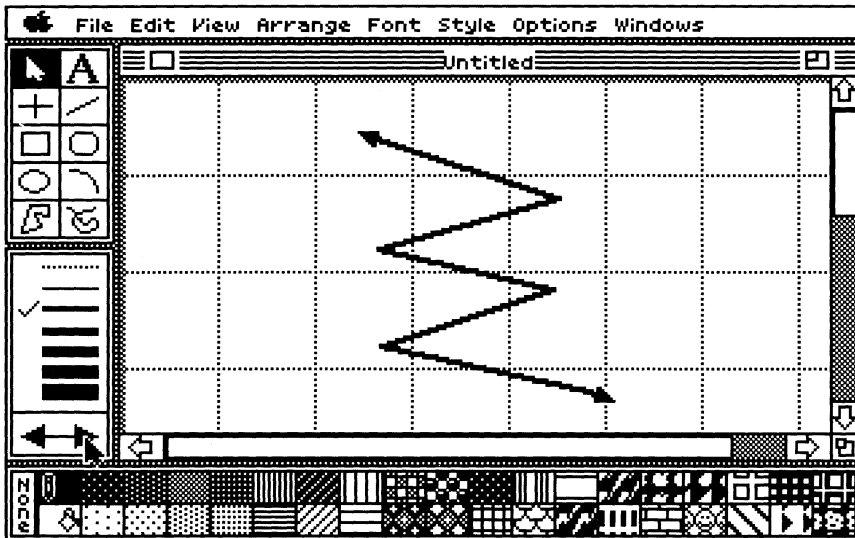
- ② **Choose Edit Polygon Points (if you have a polygon selected) or Edit Arc Angles (if the selected object is an arc) from the Edit Menu.**

Handles appear at the vertices of the object, indicating that it's ready to be edited.

- ③ **Double-click on either or both of the endpoints of the object(s).**

Arrowheads appear at the endpoint(s) of the object that you double-click.

Edit Polygon Points appears dimmed on the Edit Menu unless a polygon is selected; likewise Edit Arc Angles appears dimmed unless an arc is selected.



## Text

Unlike the text in a word processing program, text objects in TopDraw are independent of each other. Text objects are treated as special objects in TopDraw; while they may be manipulated like other objects, and can be edited in many of the same ways, they can also be edited in some unique ways. You can change the font, style, and size of text objects, either existing objects or objects you are currently creating. The color of the text and the pattern of the text object may also be changed, but only on completed text objects, not on objects you are currently creating.



### Creating a Text Object

- ① **Click the text tool in the tool palette.**

The text tool becomes highlighted in the tool palette, indicating that it's the currently selected tool, and the pointer changes to an I-beam pointer.

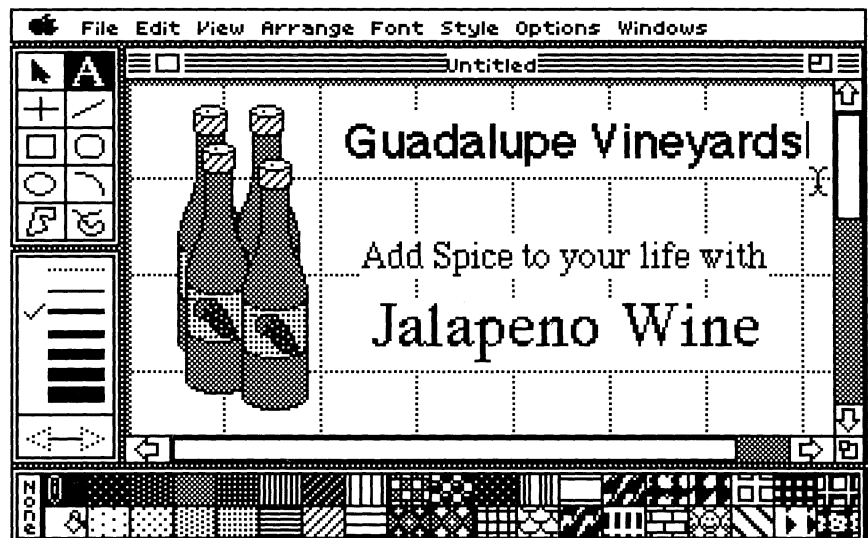
② Position the I-beam at the place in the document where you'd like the text to begin and click the mouse button.

A blinking vertical line — the insertion point — appears at the place where you clicked the mouse button.

③ Type the text that you want to add to your document.

④ When you're finished typing your text, click the I-beam anywhere else on the screen, select another tool, or press *return* to complete the text object.

You can add text to a completed text object by selecting the text, clicking the insertion point at the place in the text object where you'd like to continue the text, and typing the new text.



Font

### Changing the Font of Text Objects

- ① Use the arrow pointer tool to select the text object you wish to change.

Handles appear around the object, indicating that it's selected.

- ② Choose the new font from the Font Menu.

The selected text changes to the new font.

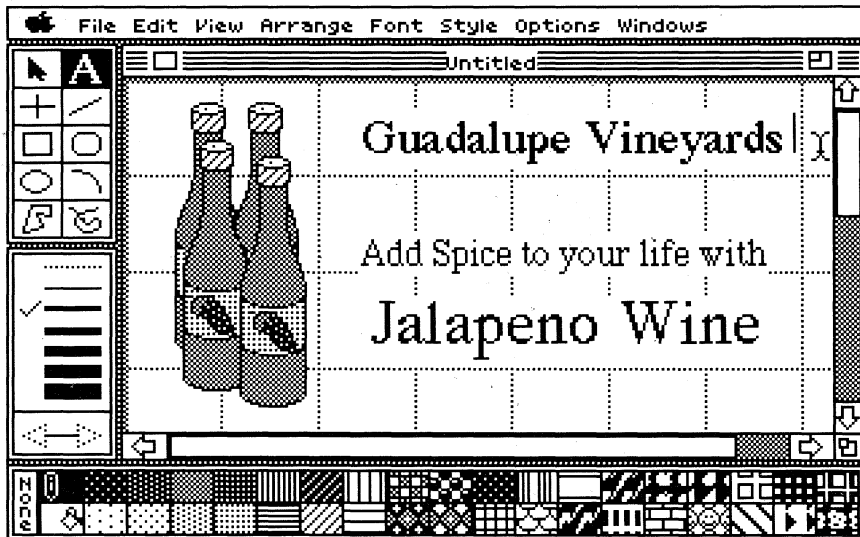
*You can also change the font of the text you're currently creating or editing — just choose the font you want to use while you're working on the text, and it will change to the font you specify.*

Style

### Changing the Style of Text Objects

- ① Use the arrow pointer tool to select the text object you wish to change.

Handles appear around the object, indicating that it's selected.



Style

## Changing the Size of Text Objects

② Choose the new style from the Style Menu.

The selected text changes to the new style.

*You can also change the style of the text you're currently creating or editing — just choose the styles you want to use while you're working on the text.*

One unique feature of text objects is that you can add styles to a text object in any combination: for example, a single text object can be both bold and italic, or simultaneously underlined and outlined.

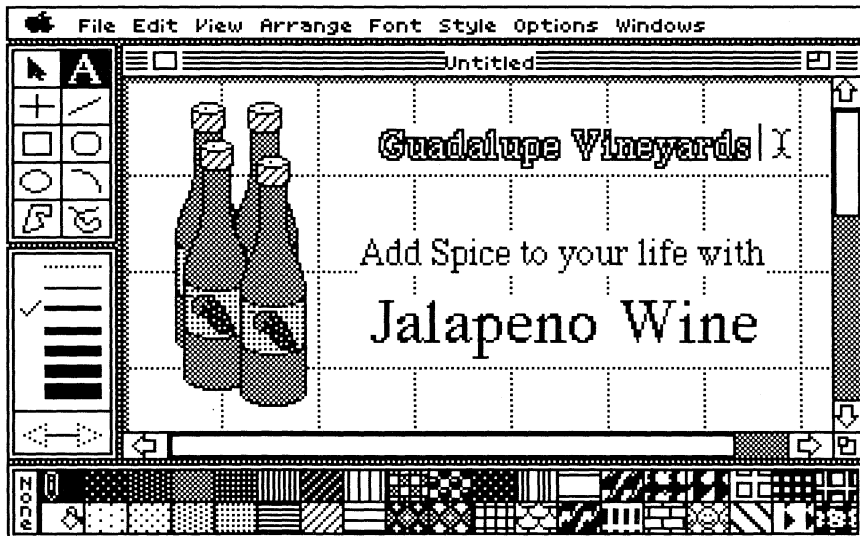
① Use the arrow pointer tool to select the text object you wish to change.

Handles appear around the object, indicating that it's selected.

② Choose a new size from the Font Menu.

Text objects are measured in **points**. A point is a typographic measurement equal to 1/72nd of an inch.

The selected text changes to the new point size.



## Editing Objects

Once an object has been drawn, there are a number of things that you can do to modify, or edit, the object even further. By changing the tool and option settings (line size, color, pen and fill pattern, etc.) before drawing an object, of course, you can make the necessary changes before the object's drawn. Some editing operations, however — such as duplicating, clearing, and reshaping objects — can be performed only on previously drawn objects which you've selected. This section begins, then, with an explanation of selecting objects.



## Selecting Objects

To edit an object in TopDraw, you must first select it. When an object is selected, four small black blocks, called handles, appear around the object, and the pen and paint bucket icons in the pattern palette move to the line and fill patterns of the object. In addition, the check mark in the line palette moves to the line size of the selected object (unless the object has a line width created with the Line Size command which is not contained in the line palette).

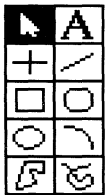
There are a number of ways to select an object or group of objects.





Selecting an Object

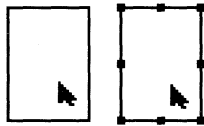
① Select the arrow pointer tool if it's not active.



② Click anywhere inside the object or along its border.

Handles appear around the object, indicating that it's selected.

If an object has None as its fill, you won't be able to click inside the object. See "Selecting Objects Filled with None" on the next page.

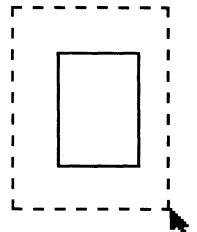


**OR**

① Select the arrow pointer tool if it's not active.

② Click above or below the object and drag over the object to draw a selection box around it. Release the mouse button.

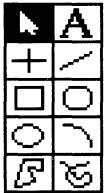
Handles appear around the selected object.





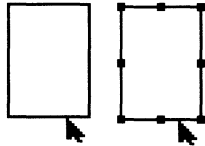
Selecting  
Objects  
Filled with  
None

① Select the arrow pointer tool if it's not active.



② Click anywhere along the border of the object.

Handles appear around the object, indicating that it's selected.

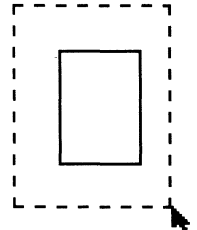


**OR**

① Select the arrow pointer tool if it's not active.

② Click above or below the object and drag over the object to draw a selection box around it. Release the mouse button.

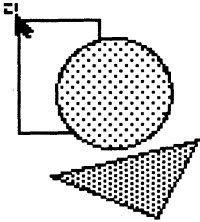
Handles appear around the selected object.



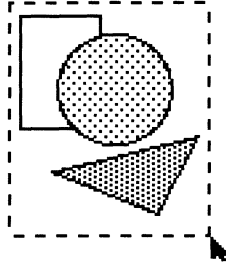


Selecting  
Multiple  
Objects

① Select the arrow pointer tool if it's not active.

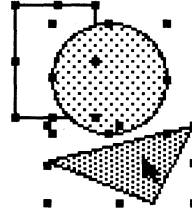


② Click above or below the grouped objects to be selected and drag over the objects to draw a selection box around them, making sure to include in the selection box the entire boundary of each of the objects that you want to select.



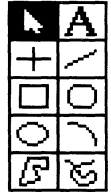
③ Release the mouse button.

Handles appear around each of the objects selected. Any edits you make will be made to all the selected objects.

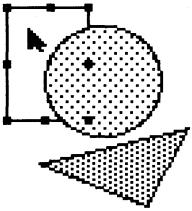


**OR**

① Select the arrow pointer tool if it's not active.



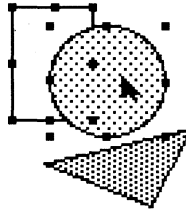
② Click the first object that you want to select.



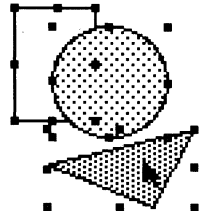
③ Hold down the *shift* key.

④ One by one, click the other objects that you want to select.

Handles appear around each of the objects as you select them, indicating that they're selected. Any edits you make with more than one object selected will be made to all selected objects.



⑤ Release the *shift* key.





Deselecting an Object While Others Remain Selected

① Hold down the *shift* key.

② Click on each object that you want to deselect.

The handles around each object disappear as you deselect it, indicating that the object's no longer selected.

Clicking (with *shift* held down) an object again will reselect it.



Selecting All Objects in a Document at Once

■ Choose **Select All** from the Edit Menu or press A.

Handles appear on all objects in the document, indicating that they're all selected.



## Changing an Object's Line Pattern

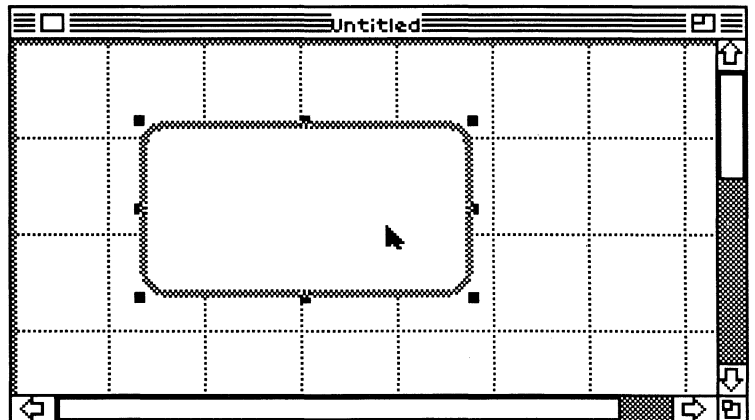
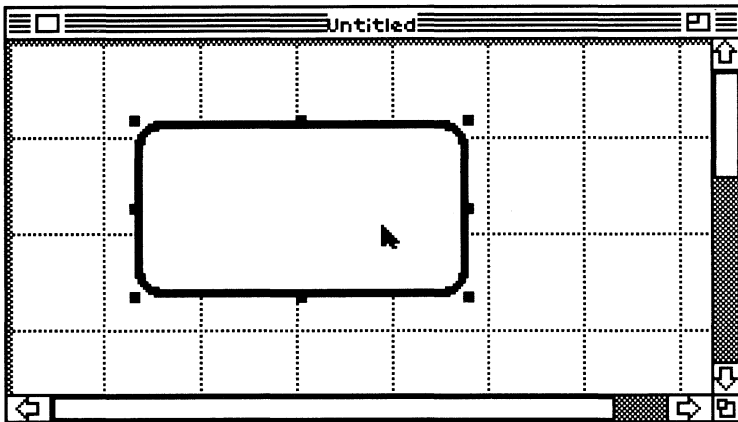
- ① Use the arrow pointer tool to select the object to be changed.

Handles appear around the object, indicating that it's selected.

- ② Choose a new line pattern by dragging the pen icon to another pattern in the pattern palette, or click the left side of the pattern box of the desired pattern.

The line pattern of the object changes to the new pattern.

You can't drag the pen icon to the *None* pattern. To draw an object with no border, select the dotted line in the line palette.





## Changing an Object's Fill Pattern

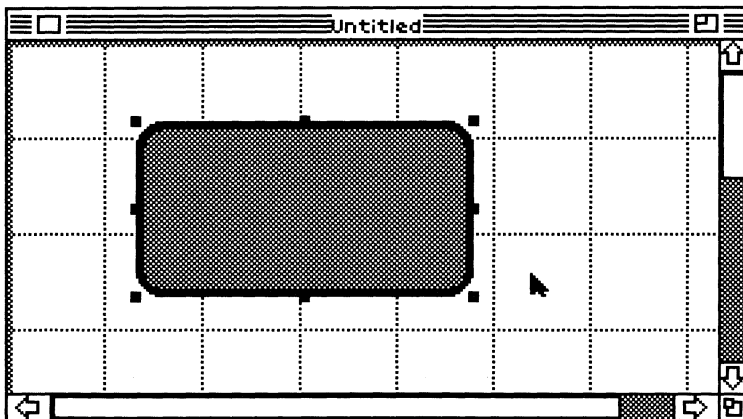
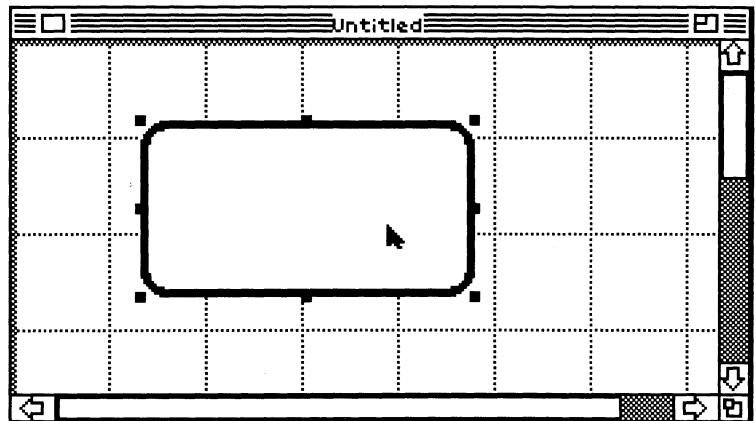
- ① Use the arrow pointer tool to select the object to be changed.

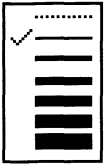
Handles appear around the object, indicating that it's selected.

- ② Choose a new fill pattern by dragging the paint bucket icon to another pattern in the pattern palette, OR click the right side of the pattern box of the desired pattern.

The fill pattern of the object changes to the new pattern.

If you drag the paint bucket icon to the *None* pattern, the object will have no fill, and will appear transparent.





### Changing an Object's Line Size

- ① Use the arrow pointer tool to select the object to be changed.

Handles appear around the object, indicating that it's selected. The check mark on the line palette moves to the line size of the object (unless the object's line size is a non-standard one created with the Line Size command and is therefore not in the line palette).

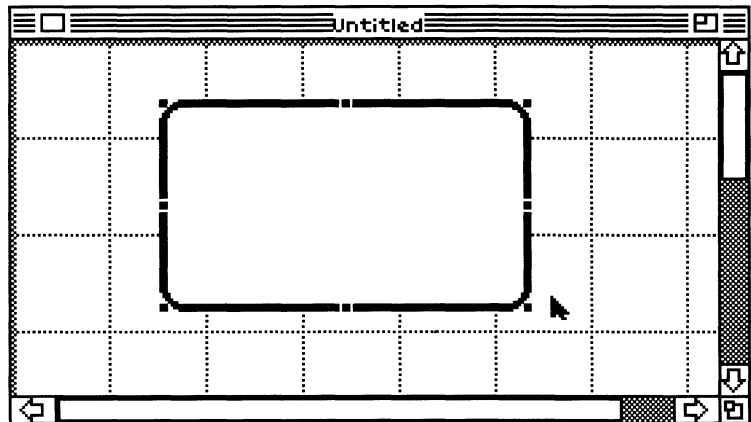
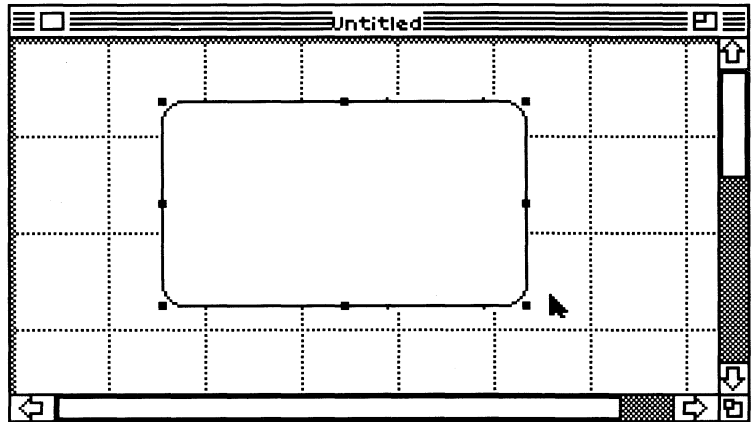
- ② Choose a new line size by selecting a different size in the line palette.

The thickness of the lines of the selected object changes to the new line size.

**OR**

- ① Use the arrow pointer tool to select the object to be changed.

Handles appear around the object, indicating that it's selected. The check mark on the line palette moves to the line size of the object.





**② Choose the Line Size command from the Edit Menu.**

A dialog box appears, allowing you to edit the size of the selected object's lines. The Line Size dialog box contains a line definition box — which lets you edit the line size with your mouse — as well as a sample rectangle bordering the dialog box which shows the size and shape of the line as you change it, and buttons to confirm (OK) and cancel (Cancel) your changes to the line size.

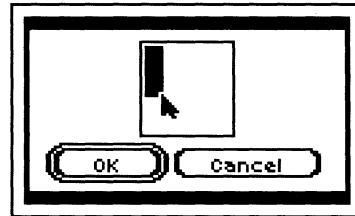
The line definition box contains a visual representation of the currently selected line size (the line size of the selected object) shown at *maximum enlargement*. The sample rectangle, on the other hand, displays the line size and shape at *normal scale*.

**③ Change the line size and shape by clicking on this representation and dragging it to the desired shape and dimensions.**

You'll see the sample rectangle change to show the effects of your changes to the line size.

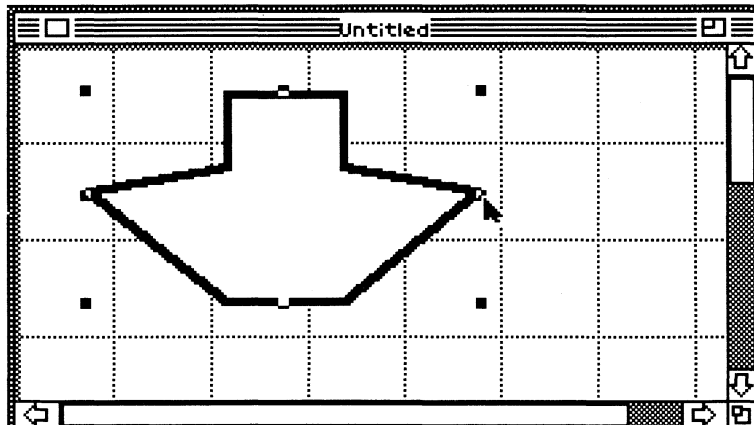
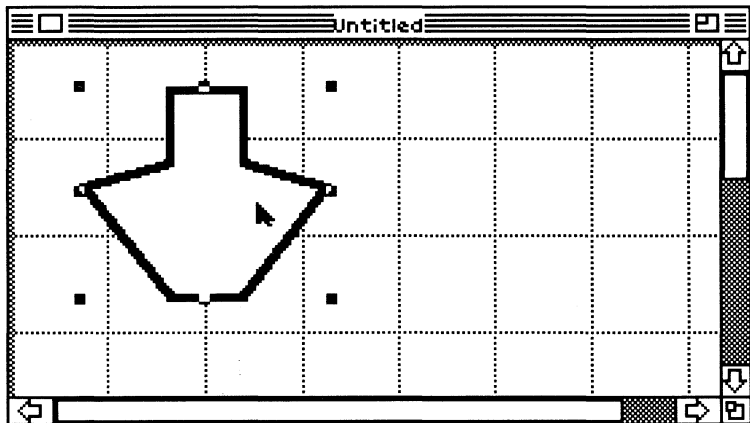
**④ Click OK to confirm the new line size.**

The thickness of the lines in the selected object changes to the new line size. Clicking Cancel cancels the operation.



## Reshaping Objects

With the exception of text objects, you can resize and repropotion any object by using the handles that appear around it when it's selected. To reshape a selected object, you'll drag the appropriate handles in the necessary direction in the document window.



Reshaping  
Using an  
Object's  
Handles

① Use the arrow pointer tool to select the object(s) to be reshaped.

Handles appear around each selected object.

② Drag the appropriate handles in the desired directions to reshape the object as you see fit.

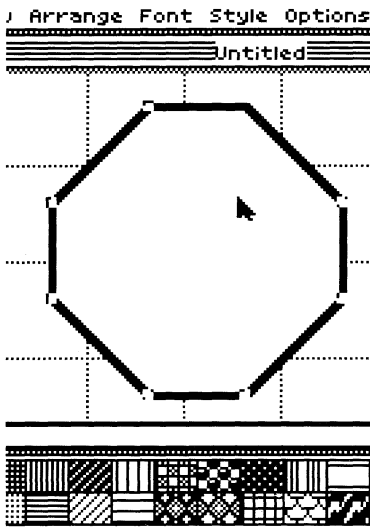
The object is reshaped to the proportions that you've specified by dragging its handles.



## Reshaping a Polygon or Freehand Shape by Individual Points

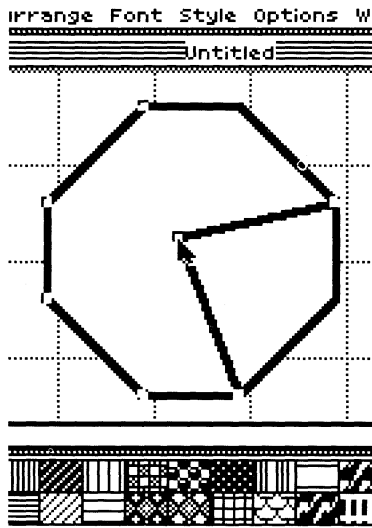
① Use the arrow pointer tool to select the polygon or freehand object to be reshaped.

Handles appear around the object, indicating that it's selected.



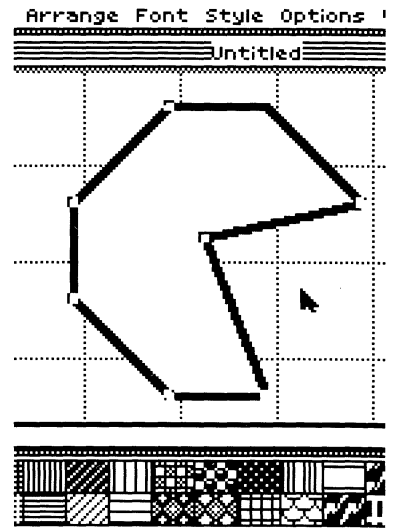
② Choose Edit Polygon Points from the Edit Menu or press  $\text{⌘E}$ .

A handle appears on each of the individual points of the object.



③ Drag the appropriate handles to new locations in the document to change the shape of the object to suit your specifications.

The object is reshaped as you move each handle.



## To Undo an Edit

The Undo command will undo the last change made in your document, with the exception of changes in the view scale and some commands. You may want to experiment with TopDraw to discover what operations can be undone under different circumstances.

### ■ Choose Undo from the Edit Menu or press Z.

The effects of the last operation you performed are undone.

Operations that can be undone are:

- Using the Clear command
- Moving any object(s)
- Stretching any object(s)
- Flipping any object(s)
- Rotating any object(s)
- Changing the fill pattern of any object(s)
- Changing the line pattern of any object(s)
- Changing the line size of any object(s)
- Aligning objects
- Aligning objects to grid
- Editing of corner radius

## Working with Objects

Once you create objects, they can be manipulated in a number of ways: they can be moved about in a document; they can be duplicated; they can be cut or copied to the Clipboard and moved to different documents; they can be reshaped and resized; they can be rearranged and realigned to the invisible "grid" TopDraw uses to let you precisely align objects.

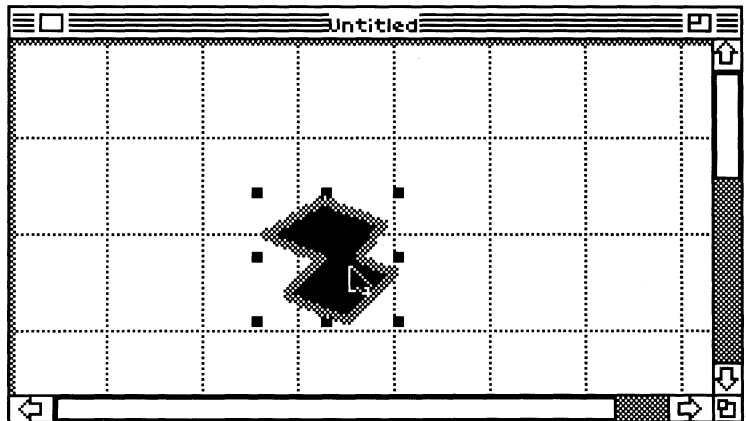
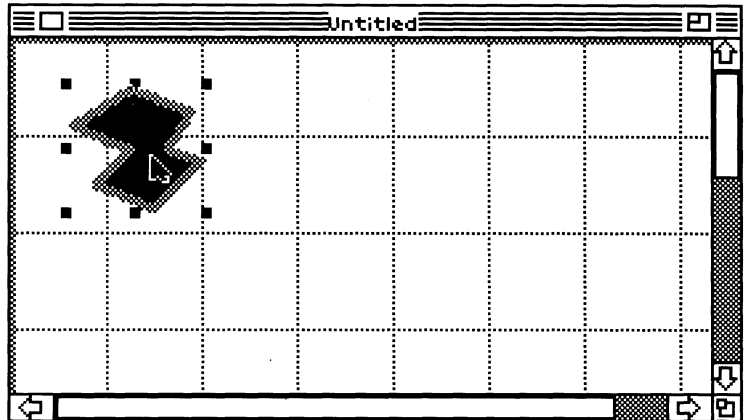


### Moving Objects in the Document Window

① Use the arrow pointer tool to select the object(s) to be moved.

Handles appear around the selected object(s).

② Holding the mouse button down, drag the object(s) to the desired location in the document.



## Clipboard Operations

TopDraw provides three commands on the Edit Menu — Cut, Copy, and Paste — which make use of the TopDraw Clipboard, an area in memory and on disk that can contain copies of things in a document. You can cut or copy something in a document and place it for temporary storage on the Clipboard; when you wish to retrieve what you put on the Clipboard, you just use the Paste command to place the Clipboard contents into the current document. This allows you to move objects around in a document and between documents, and to make copies of objects and groups of objects which can be placed into different documents.



Cutting  
Objects  
from the  
Document  
Window

① **Use the arrow pointer tool to select the object(s) to be cut.**

Handles appear around the selected object(s).

If no objects are selected, the Cut command appears dimmed on the Edit Menu.

② **Choose Cut from the Edit Menu or press ⌘X.**

The object (or objects) disappear from the document window, and a copy of each selected object is placed on the Clipboard.



## Copying Objects to the Clipboard

① **Use the arrow pointer tool to select the object(s) to be copied.**

Handles appear around the selected object(s).

If no objects are selected, the Copy command appears dimmed on the Edit Menu.

② **Choose Copy from the Edit menu or press ⌘C.**

The selected object(s) remain in the document window, and a copy of each selected object is placed on the Clipboard.



## Pasting Objects into a Document

① **Using the scroll bars, scroll the document in the document window until you see the place in the document where you want to place the contents of the Clipboard.**

② **Choose Paste command from the Edit Menu or press ⌘V.**

A copy of the contents of the Clipboard is pasted into the drawing.

If no objects have been cut or copied to the Clipboard, the Paste command appears dimmed on the Edit Menu.



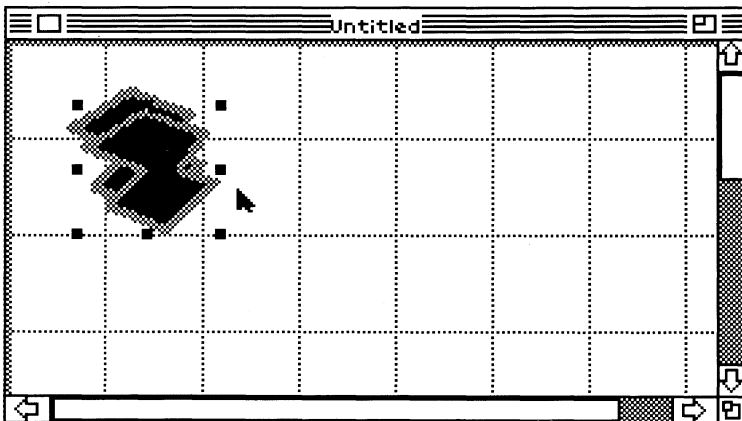
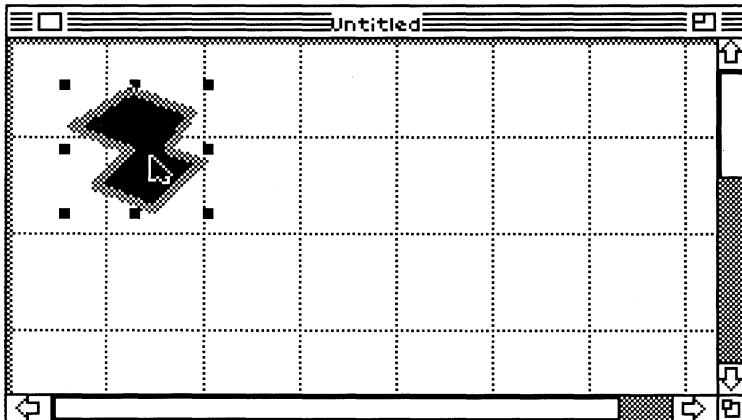
## Duplicating Objects

① Use the arrow pointer tool to select the object(s) to be duplicated.

Handles appear around the selected object(s).

② Choose the Duplicate command from the Edit menu or press ⌘D.

An exact copy of each object that's selected appears in front of and to the right of the original.







## Clearing Objects from the Document

- ① Use the arrow pointer tool to select the object(s) to be removed.

Handles appear around each selected object.

- ② Choose the Clear command from the Edit Menu or press the *delete* key.

The object disappears from the document window, without being copied to the Clipboard.

## Arranging Objects

Once you've drawn an object, you may want to rearrange it in relation to the rest of the drawing. TopDraw lets you place objects on top of one another, in **object levels**. This section explains how to rearrange objects in relation to one another — how to bring an object to the top of a group of objects, how to send an object to the back of a group of objects, and how to "shuffle" up and down one object level. This section also discusses how to rotate, flip, group, align, and lock objects.



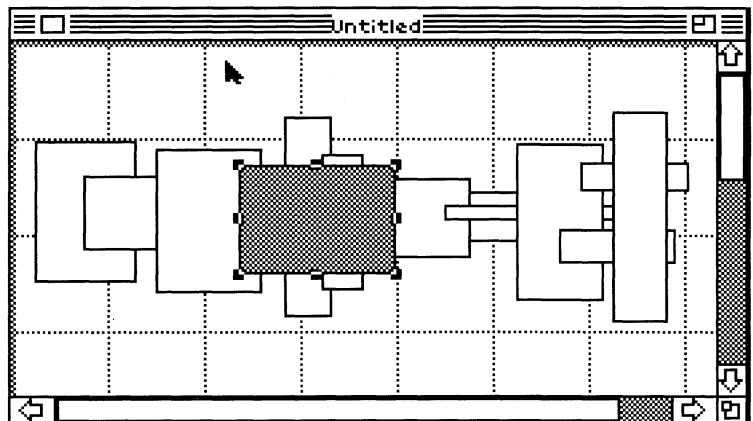
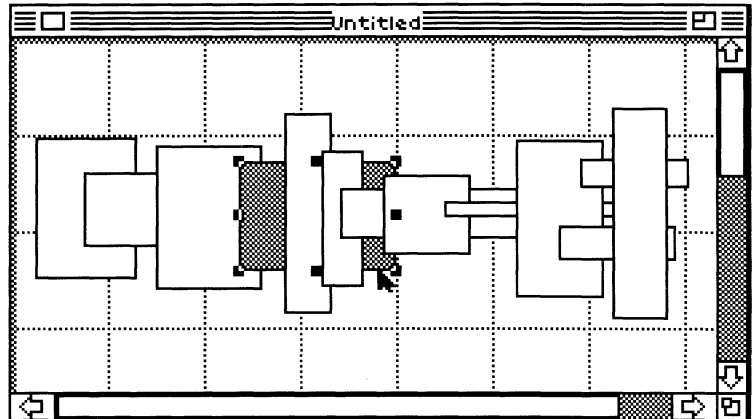
**Bringing  
Objects to  
the Front**

① Use the arrow pointer tool to select the appropriate object(s).

Handles appear around the selected object(s).

② Choose Bring to Front from the Arrange Menu or press  $\text{⌘}+$ .

The object is brought to the top object level.





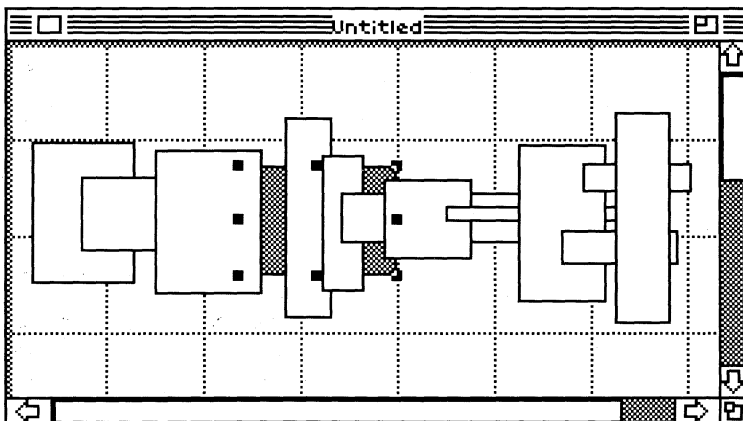
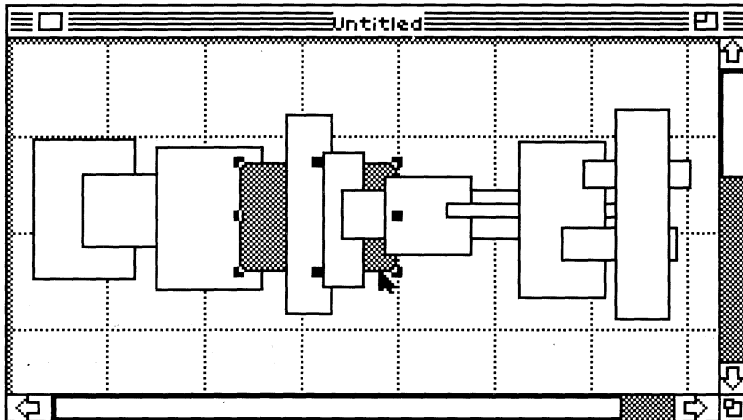
## Sending Objects to the Back


① Use the arrow pointer tool to select the appropriate object(s).

Handles appear around the selected object(s).

② Choose Send to Back from the Arrange Menu or press **⌘-**.

The object is sent to the bottom object level.



 **Shuffling  
Objects Up  
One Object  
Level**

① Use the arrow pointer tool to select the appropriate object(s).

Handles appear around the selected object(s).


② Choose **Shuffle Up** from the **Arrange** Menu or press ↑.

The object moves up one object level.

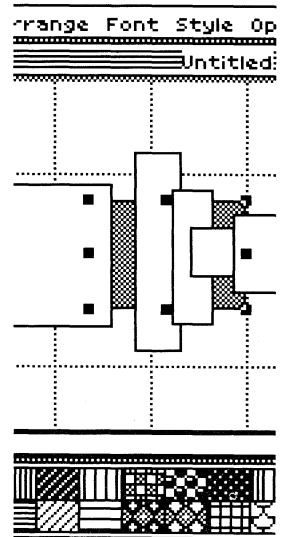
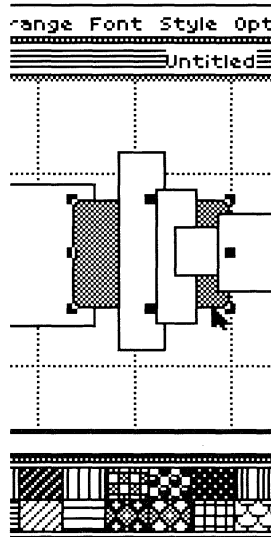
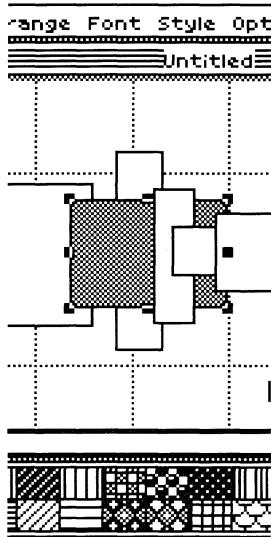
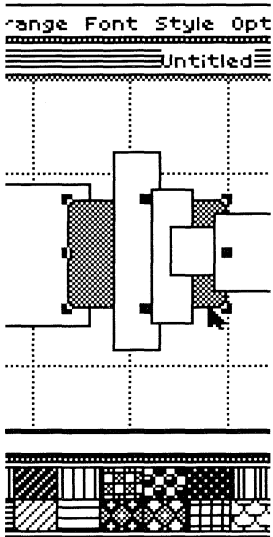
 **Shuffling  
Objects Down  
One Object  
Level**

① Use the arrow pointer tool to select the appropriate object(s).

Handles appear around the selected object(s).

② Choose **Shuffle Down** from the **Arrange** Menu or press ↓.

The object is sent to the next lower object level.

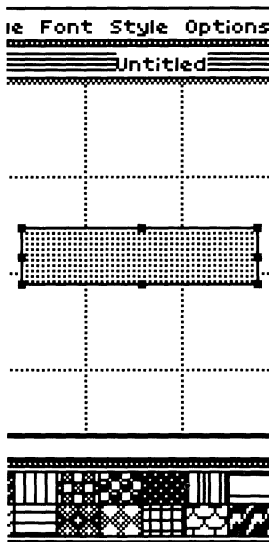




## Rotating Objects

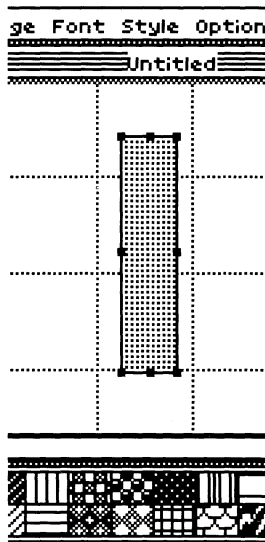
- ① Use the arrow pointer tool to select the object(s) to be rotated.

Handles appear around the selected object(s).



- ② Choose either Rotate Left or Rotate Right from the Arrange Menu.

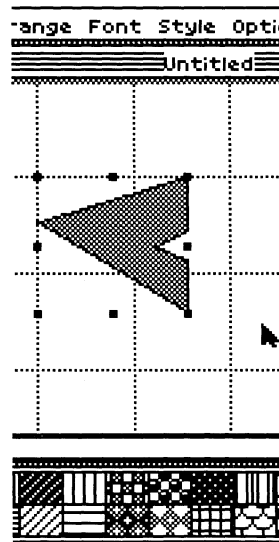
The object rotates 90 degrees to the left or to the right, depending on which command you choose.



## Flipping Objects

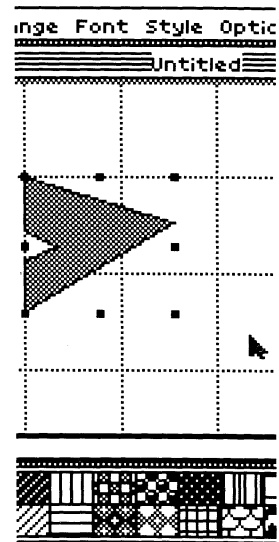
- ① Use the arrow pointer tool to select the object(s) to be flipped.

Handles appear around the selected object(s).



- ② Choose either Flip Vertical or Flip Horizontal from the Arrange Menu.

The object flips to a mirror image of itself horizontally or vertically, depending on which command you choose.





## Grouping Objects Together

- ① Using the arrow pointer tool, select the first object that you'd like to include in a group of objects.

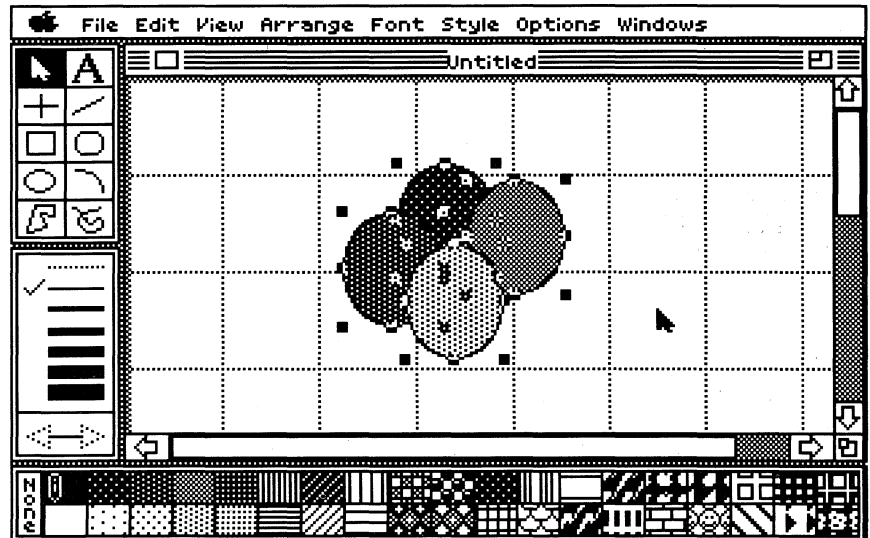
Handles will appear around the object, indicating that it's selected.

- ② Hold down the *shift* key.

- ③ One by one, select the other objects that you want to include in the same group.

Handles appear around each object as it's selected.

- ④ Release the *shift* key.



- ⑤ **Choose Group from the Arrange Menu or press**  
⌘G.

All of the objects that you grouped will now be treated by TopDraw as a single object, and can be manipulated with a single set of handles.

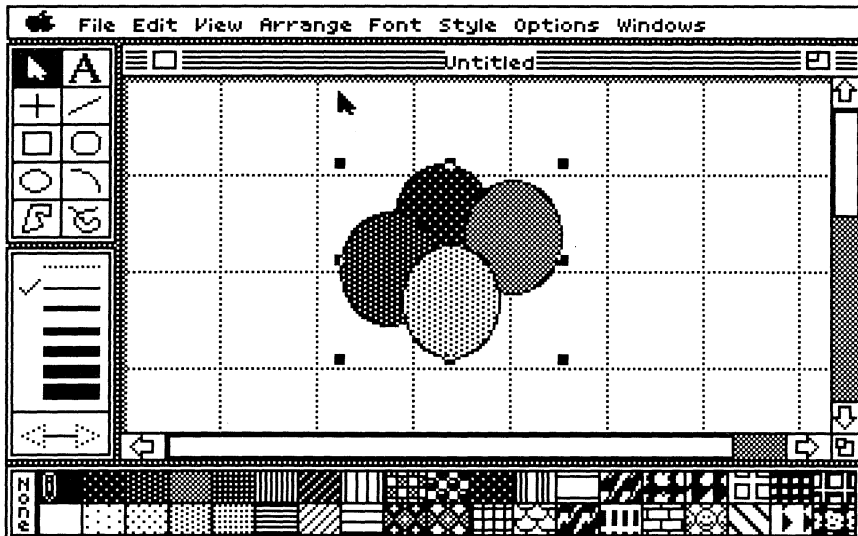
**OR**

- ① **Using the arrow pointer tool, draw a selection box around all of the objects that you'd like to include in a group.**

Handles appear around each object you draw the box around.

- ② **Choose Group from the Arrange Menu or press**  
⌘G.

All of the objects that you grouped will now be treated by TopDraw as one object, which can be manipulated with a single set of handles.





## Aligning Objects to Other Objects

- ① Using the arrow pointer tool, select the first object that you'd like to align.

Handles appear around the object, indicating that it's selected.

- ② Hold down the *shift* key.

- ③ One by one select the other objects that you also want to align.

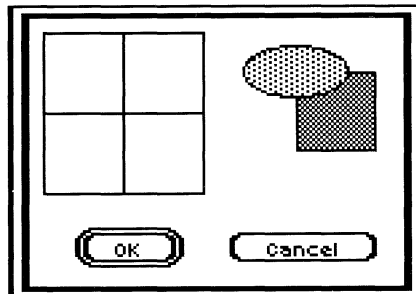
Handles appear around each object as it's selected.

You can also select the objects by using the arrow pointer tool to draw a selection box around all the objects that you'd like to align.

- ④ Choose Align Objects from the Arrange Menu or press ⌘@.

A dialog box appears, offering several options for aligning the selected objects. The Align Objects dialog box contains a large rectangle bisected by both horizontal and vertical lines (the **windowframe**), as well as two sample objects — a rectangle and an oval — which show the effects of the alignment you specify.

You specify the alignment you want by clicking on the appropriate lines on the large windowframe rectangle containing the intersecting horizontal and vertical lines. Clicking on a line on the windowframe turns it red, indicating that it's selected; clicking on it again turns it back to black, deselecting it. You can select two alignments at once by clicking on the intersection of two lines.





Imagine that the windowframe represents an invisible windowframe surrounding the selected objects. Selecting a line on the windowframe tells TopDraw to align the selected objects to the corresponding line on the "invisible windowframe."

Selecting the left line, for example, causes the objects to be aligned on their left sides; selecting the top line aligns the objects on their top sides; clicking the center vertical line causes the objects to be centered according to their vertical axes; etc. As you select these lines on the windowframe, the sample rectangle and oval are rearranged to show you the effects of the alignment you specify.

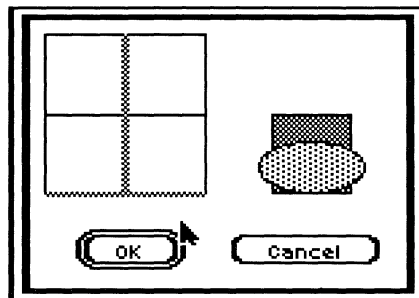
⑤ Click on the lines representing the types of alignment you want.

The lines turn red as you select them.

⑥ Click OK.

The objects are aligned to each other in the manner specified.

If you'd like to cancel the operation and leave the selected objects unaligned, click Cancel. Handles will appear around each of the objects, indicating that they're selected.



## Aligning Objects to the Grid

The TopDraw grid is an invisible grid divided according to the minor ruler divisions you specify with the Edit Rulers command (for more information on this command, see "Edit Rulers" in Chapter Four, "TopDraw Reference"). The grid allows you to line up objects precisely according to the rulers.

① **Use the arrow pointer tool to select the object(s) to be aligned.**

Handles appear around the selected object(s).

② **Choose Align to Grid from the Arrange Menu or press \*.**

The object is realigned and reportioned so that its edges fit neatly to the nearest grid lines, located at the minor ruler divisions.

## Locking Objects to the Drawing Surface

TopDraw lets you lock objects to a document's drawing surface, so they can't be deleted or moved, even when they're selected.

① Use the arrow pointer tool to select the object(s) you want to lock to the drawing surface.

Handles appear around each selected object.

② Choose Lock from the Arrange Menu or press .

The object is locked ("glued") to the drawing surface, and the handles of the object are hollow, indicating that the object's locked. You'll be unable to move, delete, duplicate, or reshape the object without unlocking it. The only operations you can perform on a locked object are Unlock and Copy.

## Unlocking Objects from the Drawing Surface

① Use the arrow pointer tool to select the object(s) to be unlocked.

Hollow handles appear around each selected object.

② Choose **Unlock from the Arrange Menu** or press ].

The object is unlocked from the drawing surface, and you're once again able to move, delete, resize, and reshape it like other objects.

## Smoothing Polygons and Freehand Objects

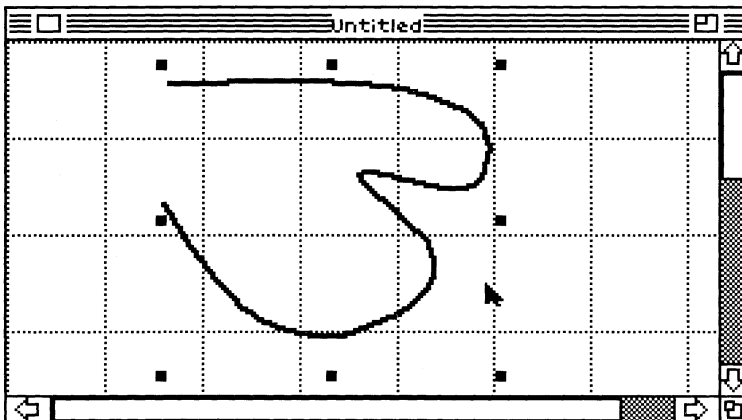
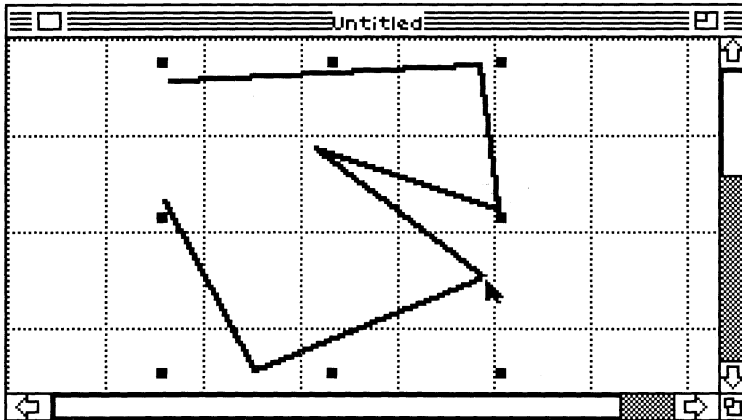
When you need to take the rough edges off a drawing, TopDraw lets you **smooth** polygons and freehand objects. When you smooth an object, a smooth curve is mapped within each vertex (or "point") of the polygon, causing the entire object to appear more curved where it had been angular.

① Use the arrow pointer tool to select the object(s) to be smoothed.

Handles appear around each selected object.

② Choose **Smooth Polygon** from the **Edit Menu** or press  $\text{⌘}(\text{S})$ .

The object is smoothed. Curved lines take the place of straight ones. In many cases, the border of a smoothed object may not touch the handles that control the object. To unsmooth a polygon or freehand shape, select the object and choose **Unsmooth Polygon** from the **Edit Menu** or press  $\text{⌘}(\text{U})$ .



## Working With Entire Documents

While most of the commands in TopDraw are for creating and editing objects, some commands let you work with an entire document — and all its contents — at one time.

## Changing the Document Size

TopDraw lets you control the number of pages of paper on which a document appears when printed. You can change the document size from one page to a maximum of 64 pages.

**① Choose Document Size from the View Menu.**

A dialog box appears which contains an eight by eight grid of miniature pages, which can be selected in any rectangular pattern to specify the shape and size of the document. For example, a drawing could be two pages wide by six pages long, or eight pages wide by four pages long, etc. The current drawing shape and size is represented by the number of highlighted pages in the page grid.

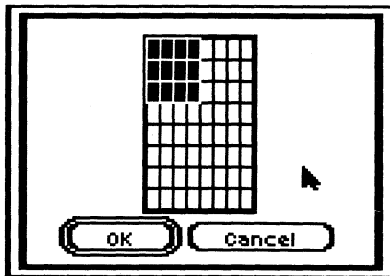
**② Click on the pages in the page grid which represent the desired size and shape of the document.**

The new drawing size is indicated by the highlighted pages.

**③ Click OK to confirm the new document size.**

When you print the document, it will be printed according to this specified document size and shape.

If you wish to cancel the Document Size operation, click the Cancel button.



## Changing the Document Scale

Document scale refers to the size of your document as it appears in the document window. You may choose to "zero in" on one portion of the document or have a view wide enough to see the entire document within the document window. The view commands allow you to change the scale of a document in the document window.

To View the Document Closely

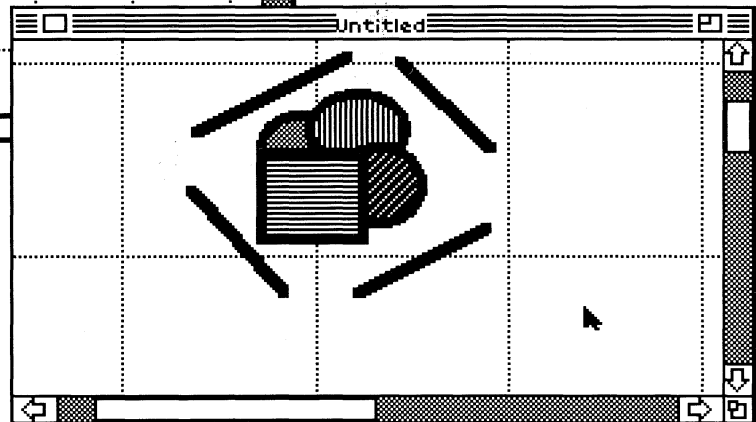
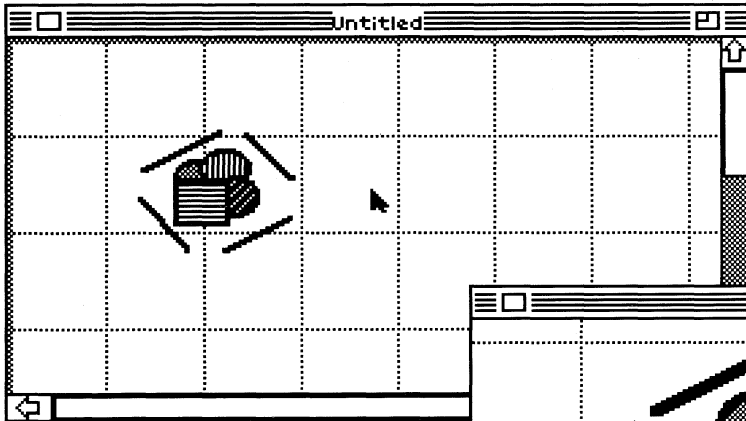
■ **Choose Enlarge from the View Menu or press  $\text{⌘} >$ .**

The view of your document will "zoom in" to be twice as close as the previous one; the objects appear *enlarged* to twice their previous size (hence the name of the command). You can choose Enlarge several times until you reach maximum enlargement (the closest possible view of the document).

**OR**

■ **Choose Maximum Enlargement from the View Menu or press  $\text{⌘} M$ .**

The view of your document will be as close as TopDraw will allow — the objects will appear at maximum enlargement.






To See More of the Document at Once

■ Choose Reduce from the View Menu or press ⌘.

The view of your document is twice as broad as the previous one — in other words, the objects in the document window will appear only half as large. You may choose Reduce several times until you reach the point at which the entire document appears in the document window.

OR

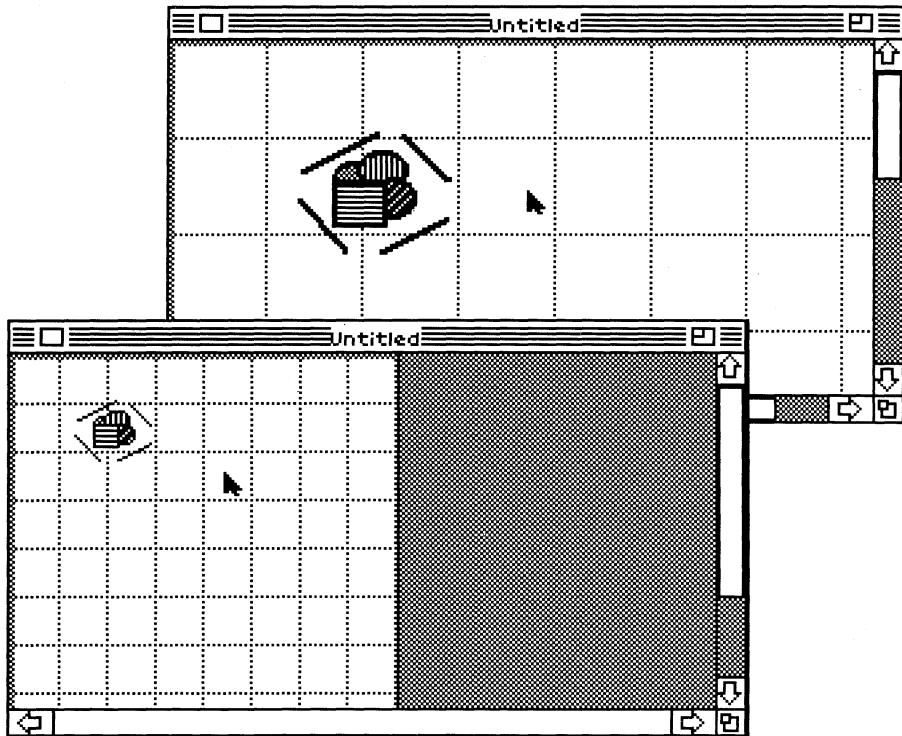
■ Choose Reduce to Fit from the View Menu or press ⌘F.

The view of your document will be set so that the entire document appears in the document window at once — the objects appear at maximum reduction.

Returning the View to Normal Scale

■ Choose Normal Scale from the File Menu or press ⌘N.

The view of your document returns to the default document size setting.



## Editing the Colors

### ① Choose Edit Colors from the Options Menu.

A dialog box appears. The Edit Colors dialog box contains two palettes which combined display all of the colors currently available (with a grey selection frame around the current color). The top palette contains the four colors used by TopDraw for menus, windows, and palettes. The bottom palette contains the remaining 12 colors.

In addition, the dialog box contains two sets of three vertical scroll bars: R, G, and B, which control the amount of red, green, and blue in the current color; and H, I, and S, which control the hue (color), intensity (brightness of the color) and saturation (richness of the color).

### ② Click on the color you want to edit to select it.

A grey frame appears around the color you choose. The scroll bars adjust to reflect the characteristics of the color.

### ③ Edit the red, green, and blue values in the color using the R, G, and B scroll bars

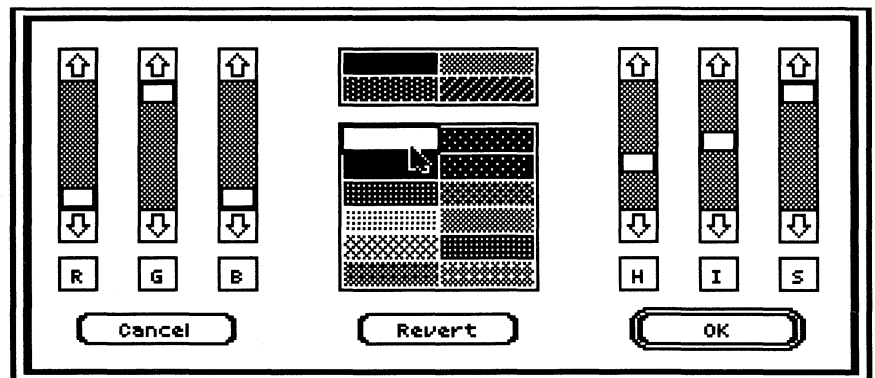
OR  
use the H scroll bar to select a color, and the I and S scroll bars to modify the intensity and saturation of the color.

The selected color changes to reflect the modifications you make with the scroll bars.

### ④ Click OK to confirm the new colors that you've created.

Any objects in the document that contain an edited color change to replace the old color with the new one.

To cancel any edits you've made and return to your document, click Cancel. To cancel your edits to the colors but remain in the Color Editor, click the Revert button; the last saved versions of the color palettes will appear.



## Editing the Patterns

① Choose the pattern that you want to edit from the pattern palette by dragging the paint bucket (fill pattern) icon to the desired pattern or by clicking on the right side of the pattern box.

② Choose Edit Patterns from the Options Menu.

A dialog box appears containing a miniature color palette (the current selected color is surrounded by a grey selection frame), an edit grid with a large representation of the current pattern, and a sample fill area.

You can also double-click a pattern in the pattern palette to choose it and bring up the pattern editor dialog box.

③ Using the colors in the miniature palette, create the pattern that you want in the pattern edit grid.

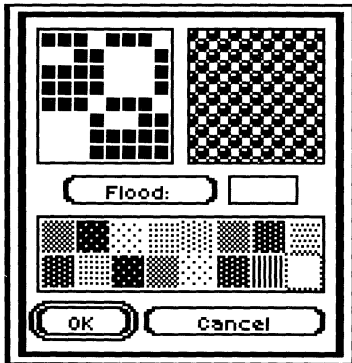
Click on a color in the palette to select the current color, then click on the appropriate boxes in the edit grid to change the corresponding components of the pattern to that color. You can use any of the current colors when editing a pattern.

The sample fill area changes as you draw, showing how the pattern that you're working on looks after each change.

④ Click OK to confirm the new Pattern.

Any objects that were filled with the old pattern will now be filled with the new one.

To create a solid color pattern, select the color you want in the miniature palette and click Flood.



## Using Rulers

To help you make more accurate drawings, as well as let you measure objects and keep track of where a particular object is within a document, TopDraw provides on-screen rulers, which can display either metric or English measurements.

### To Show Rulers

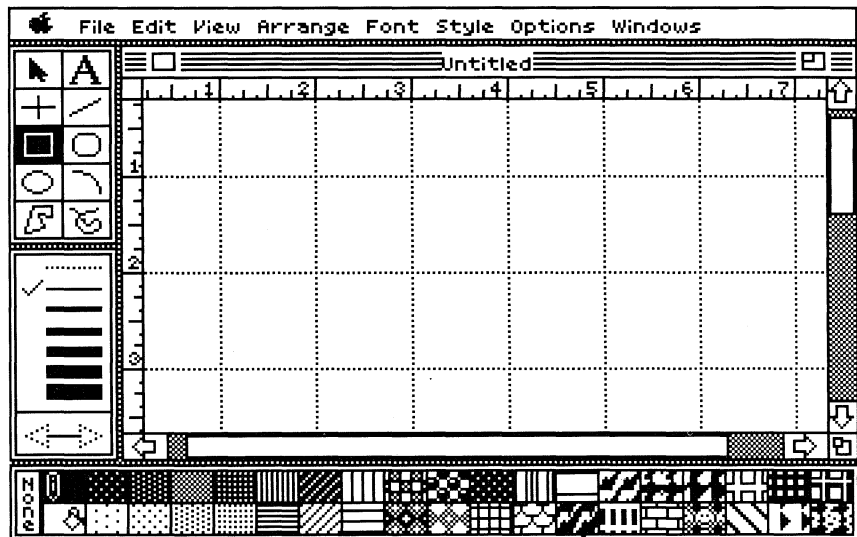
■ **Choose Show Rulers from the Options Menu or press ⌘R.**

Rulers appear at the top and left sides of the document window.

### To Hide Rulers

■ **Choose Hide Rulers from the Options Menu or press ⌘R.**

The rulers disappear from the document window.



## Editing the Rulers

**① Choose Edit Rulers from the Options Menu.**

A dialog box appears containing options for creating custom rulers.

**② Specify whether you want the rulers to use Inches or Centimeters as the unit for major divisions on the ruler scales.**

**③ Choose the number of minor divisions you want to display between the major divisions on the ruler scales.**

You can have anywhere from one to 32 minor divisions.

**④ Click OK to confirm your specifications.**

The custom rulers that you've created are displayed in the document window, changing the spacing of the grid lines and thereby affecting the grid alignment of objects drawn after the rulers are changed.

Units:  
 Inches       Centimeters

Number of minor divisions:  
 1     2     3     4     5     6     8  
 10    12    16    20    24    32

OK      Cancel

## Displaying the Ruler Lines

- Choose Show Ruler Lines from the Options Menu.

The ruler lines appear behind the objects in the document window.

## Hiding the Ruler Lines

- Choose Hide Ruler Lines from the Options Menu.

The ruler lines disappear from the document window.

## Turning the Grid On

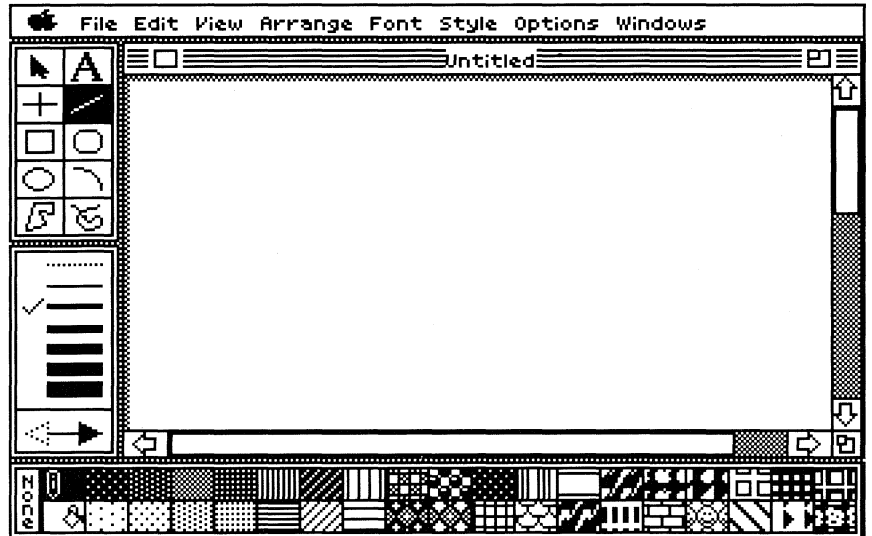
- Choose Turn Grid On from the Options Menu or press ⌘#.

The TopDraw grid becomes active.

## Turning the Grid Off

- Choose Turn Grid Off from the Options Menu or press ⌘#.

The grid becomes inactive.



## Restoring the Program Defaults

### ■ Choose Restore Defaults from the Options Menu.

The default settings for the Options Menu are returned to their state when you started the program. The Restore Defaults command cannot be undone.

## Changing to a Set of Custom Defaults

### ① Set each of the settings in the Options Menu to the way you'd like them to be when you start up TopDraw.

Be careful with this command, as it makes a permanent change that cannot easily be reverted.

### ② Choose Save Defaults from the Options Menu.

The current Options Menu settings become the default settings, and will now be active when the program starts up or when you create a new document.

## Working with Document Files

The commands on the File Menu let you perform the operations necessary for managing your document files — naming and saving documents as files on disk, opening and closing documents, printing documents. These commands use dialog boxes requesting that you provide more information about the procedure and requiring confirmation before the command is executed.

### Opening an Existing Document

① **Close the current document by choosing the Close command from the File Menu, clicking its close box, or pressing ⌘K.**

If you've made unsaved changes to your document, a dialog box appears to ask if you want to save the document before it's closed.

② **Choose Open from the File Menu or press ⌘O.**

A dialog box appears with a list of all of the TopDraw files and folders that are on the current disk.



③ If the document you want is on another disk, insert the disk and then click Disk.

You may have to eject the current disk if you're using a system with only one disk drive.

■ To open a folder, select the folder and click Open or double-click the folder name.

■ To close a folder, click Close or click the pathname displayed above the file list.

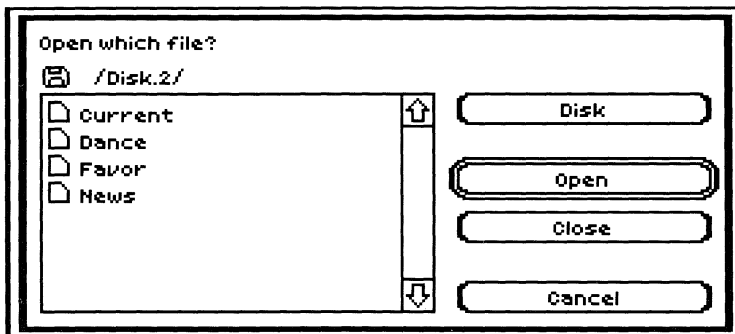
④ Click the name of the document that you want to open.

Scroll the list of document names, if necessary, to find the name of the document you want to open. You can scroll the list by clicking the scroll arrows on the box displaying the document name list.

⑤ Click Open to open the selected document.

A copy of the selected document appears in the document window. Any changes you make to the document won't affect the copy of the document until you save the changes back to disk.

You can also open a document by double-clicking its name in the document list.



## Creating a New Document

- ① **Close the current document by choosing Close from the File Menu or clicking its close box.**

If you've made unsaved changes to your document, a dialog box appears to ask if you want to save the document before it's closed.

- ② **Choose New from the File Menu.**

A new, empty document with all settings specified according to the program defaults appears on the desktop.

## Loading Bit-Mapped Pictures into TopDraw

You can bring bit-mapped pictures from paint programs such as PaintWorks Plus™ and Deluxe Paint II™ into TopDraw with the Load Picture command. Once a bit-mapped picture is loaded into TopDraw, it's treated like a bit-mapped picture inside a TopDraw rectangle. The rectangle containing the bit-map can be edited just like any rectangle in TopDraw: it can be reshaped, resized, and duplicated.

When you resize the rectangle (stretch it by dragging one of its handles), however, the bit-map is stretched as well. Think of the bit-map object as a painting inside a frame: when you stretch the frame, the bit-map "painting" is also stretched.

### ① Choose Load Picture from the File Menu.

A dialog box appears with a list of all of the bit-mapped picture files and folders that are on the current disk.

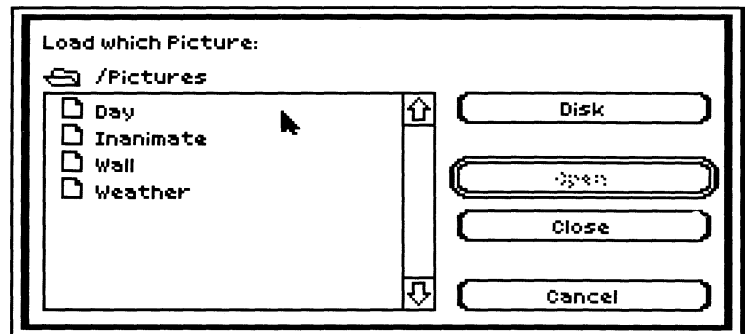
### ② Click the name of the bit-mapped picture document that you want to open.

Scroll the list of picture names, if necessary, to find the name of the picture you want to open. You can scroll the list by clicking the scroll arrows on the box displaying the document name list.

### ③ Click Open to open the selected picture document.

A copy of the selected picture appears in the document window.

You can also load a picture by double-clicking its name in the picture document list.




## Saving Documents

Saving a document means writing a copy of a document you've created or modified to disk. *You should save documents frequently as you work, to guarantee that you have a copy of the most recent version of your work on disk.*

The File Menu contains two commands for saving documents: Save and Save As. You'll use Save to save changes to a document that's already been named and saved to disk. You'll use Save As when you want to save the current document without replacing the old version of the document, or when you want to save a document under a different name or to a different disk.

## Saving a Document

■ **Choose Save from the File Menu or press S.**

The document is saved to the disk it was read from, writing over the old version of the document.

If you're saving a document for the first time, the Save As dialog box appears to let you name it (see "Saving a Document with a Different Name or to Another Disk"). Otherwise, the only dialog box to appear when you choose Save is a message telling you the name of the document being saved to disk.

## Saving a Document with a Different Name or to Another Disk

① Choose **Save As** from the File Menu.

A dialog box appears with a list of documents and folders on the current disk and an input bar containing the name of the current document.

Contains list of documents on current path

② If you want to save the document to a different disk, insert the disk and click **Disk**.

You may have to eject the current disk if you're using a system with one disk drive.

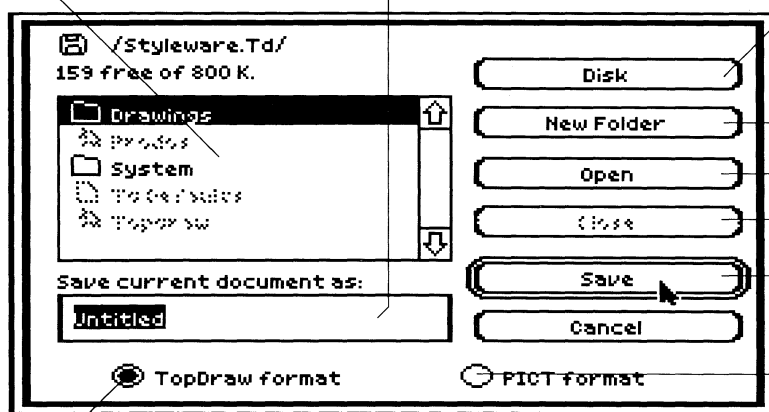
Type name of document here.

③ Type in a new name for the document, or change the pathname, or do both.

When naming documents and folders (directories), you'll want to be sure to follow the rules for naming ProDOS files. ProDOS filenames must begin with an alphabetic character and can contain no more than 15 characters, which can be letters, numbers, and periods.

④ Click **Save** or press **return** to confirm that you want to save the document.

If you've entered the name of an existing document, a dialog box appears to ask if you want to replace the document on disk with the one you're saving. If you've given the document a new name, a new document is created on the disk and its name appears in the title bar of the document window.



Click to select different disk or drive

Click to create new directory

Click to open folder (specify a subdirectory)

Click to close folder (move up one directory)

Click to save document.

Specifies Apple standard format for graphic interchange, to allow you to place TopDraw graphics in MultiScribe GS and bit-mapped "paint programs."

Saves graphic to be used exclusively with TopDraw.

## Printing Documents

TopDraw offers two different ways to print your document: Print Normal, which prints a document with normal sizing regardless of the current view scale; and Print Scaled, which prints a document proportionate to the current view scale.

If you haven't told TopDraw which printer and printer port you're using before you start printing, you may have to provide this information to the program by choosing the Choose Printer command from the File Menu. For more information on specifying a printer and printer port, see "Choose Printer" in Chapter Four.

## Printing a Document (Normal Scale)

① Choose Page Setup from the File Menu.

A dialog box appears containing different options for your document's page size, special printing effects, and orientation when printing.

② Select the desired page setup specifications by clicking the appropriate settings.

## ImageWriter Page Setup Dialog Box

The screenshot shows the 'IMAGEWRITER / PRINTER v1.2' dialog box. It has several sections: 'Paper:' with radio buttons for 'US Letter' (selected), 'US Legal', 'International Fanfold', and 'A4 Letter'; 'Printer Effects:' with checkboxes for 'Condensed', '50% Reduction', and 'No Gaps Between'; and 'Orientation:' with two icons: a vertical printer icon and a horizontal printer icon. At the bottom right are 'Cancel' and 'OK' buttons. Annotations with lines point to various parts of the dialog box and their corresponding settings:

- 8-1/2 inches wide by 11 inches tall (points to the US Letter paper option)
- 8-1/2 inches wide by 14 inches tall (points to the US Legal paper option)
- International standard: 8-1/4 inches wide by 12 inches tall (points to the International Fanfold paper option)
- European standard: 8-1/4 inches wide by 11-2/3 inches tall (points to the A4 Letter paper option)
- Prints at 50% of original size vertically (points to the 50% Reduction checkbox)
- Prints at 50% of original size horizontally and vertically (points to the No Gaps Between checkbox)
- Prints continuously, without skipping over page breaks (points to the Orientation section)
- Prints vertically on the page (points to the vertical printer icon)
- Prints sideways on the page, with the top line across the right margin of the page (points to the horizontal printer icon)

③ Click OK or press *return* to confirm the new page setup.


④ Choose Print Normal from the File menu.

A dialog box appears containing various print preferences.

⑤ Select the print options that you'd like by clicking the appropriate settings.

The print preferences are saved with the document, so that it will always print according to your specifications.

⑥ Click OK to confirm that you want to print the document according to the current settings.

Your printer begins printing the document. A dialog box appears to tell you that TopDraw is printing your document. You can cancel printing at any time by pressing the  and . keys simultaneously.

**ImageWriter  
Print Dialog Box**

Increases the pixel size to improve the appearance of color in your printouts.

Prints text only, without different fonts or sizes.

Prints all the pages in a document, from first to last.

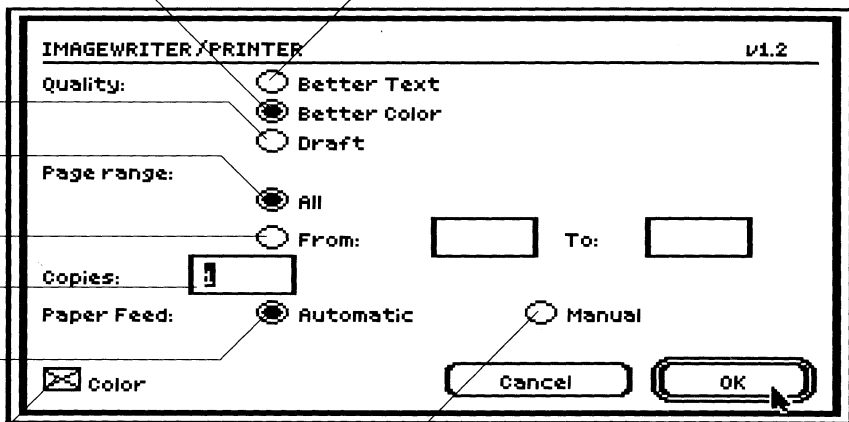
Prints the range of pages you specify.

Prints the specified number of copies of a document.

Prints continuous-feed paper.

When selected, this setting uses the color ribbon on your Imagewriter II to print in color.

Uses a reduced pixel size to produce better looking text printouts.



Prints one sheet at a time. Prompts you to feed each sheet into the printer individually.

## Printing a Document at the Current View Scale

① Using the commands in the View Menu, set the document to the view scale at which you'd like to print your document.

The document changes in the document window, according to the view scale that you specify.

② Choose Page Setup from the File Menu.

③ Select the desired page setup specifications by clicking the appropriate settings.

④ Click OK or press *return* to confirm the new page setup.

### LaserWriter Page Setup

8-1/2 inches wide by 11 inches tall

European standard:  
8-1/4 inches wide by 11-2/3 inches tall

A Japanese standard:  
7-1/4 inches wide by 10-1/4 inches tall

8-1/2 inches wide by 14 inches tall

Prints vertically on the page.

Prints sideways on the page, with the top of document across the right margin of the page

Smooths out the rough edges of graphics and non-LaserWriter fonts

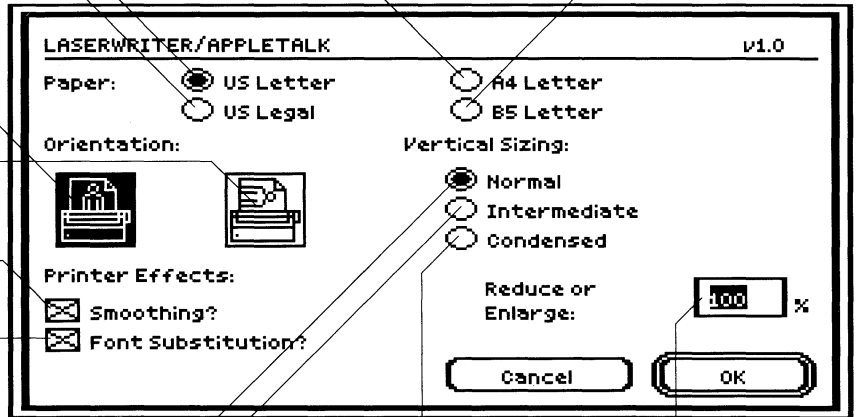
Substitutes fonts built into the LaserWriter for regular fonts.

Normal vertical sizing:  
80 dpi (dots per inch) widely by 36 dpi tall

Intermediate vertical sizing:  
80 dpi wide by 54 dpi tall

Condensed vertical sizing:  
80 dpi wide by 72 dpi tall

Reduces or enlarges drawing by the percentage you specify





**⑤ Choose Print Scaled from the File Menu.**


A dialog box appears containing various print preferences.

Print Scaled will print the document at the specified view scale.

**⑥ Select the print options that you'd like by clicking the appropriate settings.**

The print preferences are saved with the document, so that it will always print according to your specifications.

**⑦ Click OK to confirm that you want to print the document according to the current settings.**

Your printer begins printing the document. A dialog box appears to tell you that TopDraw is printing the document. You can cancel printing at any time by pressing the  and . keys simultaneously.

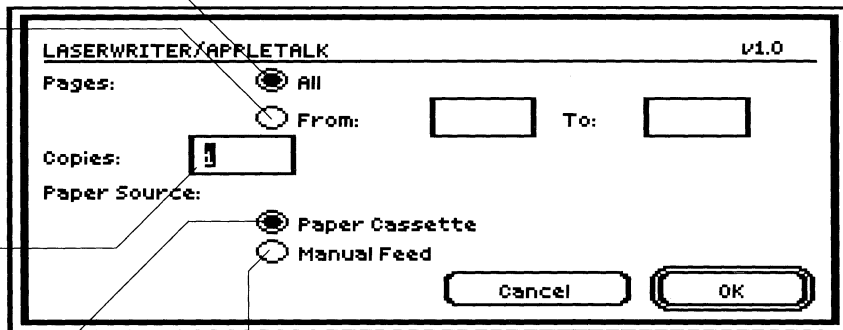
**LaserWriter  
Print Dialog Box**

Prints all the pages in a document, from first to last.

Prints the range of pages you specify. Select the insertion point in the input bar and type the numbers for the first and last pages of the range you want to print.


Prints the specified number of copies of a document. Select the insertion point in the input bar and type the number of copies you want to print.

Specifies that you'll feed the paper into the LaserWriter manually.



Specifies automatic feed from the LaserWriter's paper cassette.

## Closing Documents

- Choose Close from the File Menu or press K.

*OR*

- Click on the document's close box.

The document disappears, leaving the TopDraw desktop empty.


If you've made changes which haven't been saved when you close the document, a dialog box will appear to ask if you want to save your changes.

## Quitting TopDraw

- ① Close the current document by clicking on its close box or by choosing Close from the File Menu.

The document disappears, leaving the TopDraw desktop empty.

If you have any unsaved changes when you close the document, a dialog box will appear to ask if you want to save your changes.

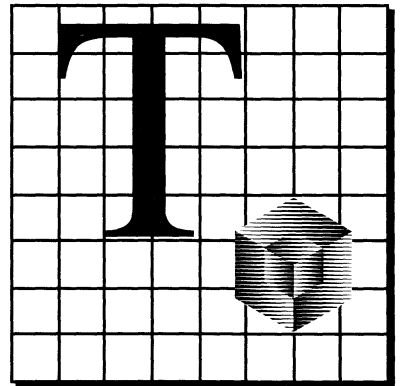
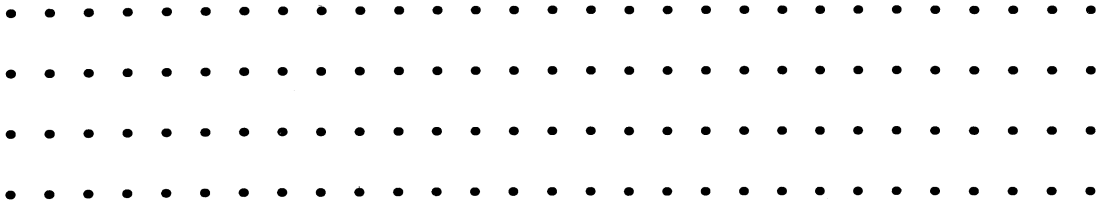
- ② Choose Quit from the File Menu or press Q.

The program stops and returns to the Apple IIGS Program Launcher, or the program from which you started TopDraw.

# Chapter 4



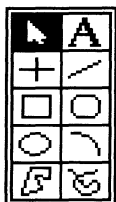
## TopDraw Reference



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## The Tool Palette



### The Arrow Pointer Tool



### Text



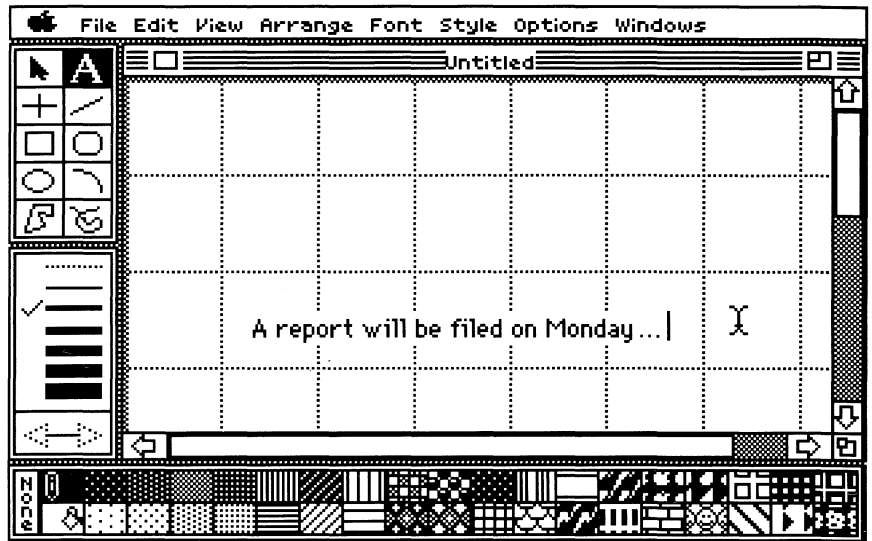
The tool palette contains the tools you'll use with TopDraw. Use the arrow pointer to activate tools in the tool palette. The tool palette can be repositioned in the document window. Place the arrow pointer anywhere along the border of the tool palette, hold the mouse button down, and move the palette to the desired position. By choosing the Clean Up Windows command in the Windows Menu, you can quickly restore the tool palette to its original position. If you want to completely remove the tool palette from the desktop, you may do so by choosing the Hide Tools command from the Windows Menu.

The arrow pointer tool lets you select objects, move them, and resize them. You select the arrow pointer tool by clicking on the arrow icon in the tool palette. When Enable Auto-Select is chosen, a box will appear around the arrow pointer tool icon in the Tool Palette.

Use the text tool to add text to your TopDraw documents.

To place text into a TopDraw document, you'll create a text object with the text tool. Select the text tool from the tool palette, and the pointer will change to an **I-beam** pointer. Place the pointer at the position in the document where you'd like to place text. If you have the rulers displayed when the text tool is selected, alignment markings appear in the ruler as you move the I-beam, indicating the current relative position of the pointer in the document and allowing you to properly position the insertion point. When you click the mouse button, the I-beam pointer will disappear and it will be replaced by a blinking vertical bar called the **insertion point**. When you type text, it will appear at this point.

You can complete the text object by clicking the mouse pointer elsewhere in the document, selecting another tool, or by pressing *return*. Most of the commands that affect other objects also affect text objects, but there are some limitations. The line pattern of a text object will always be a solid color, while the fill pattern will affect the background area behind the text. The only commands that won't affect text objects are Edit Polygon Points, Edit Arc Angles, Corner Radius, and the rotate, flip and Line Size commands.



To edit a text object, select the text tool and click the I-beam on top of the text you want to edit. The insertion point appears where you click and lets you edit the text, as in other IIGS applications.

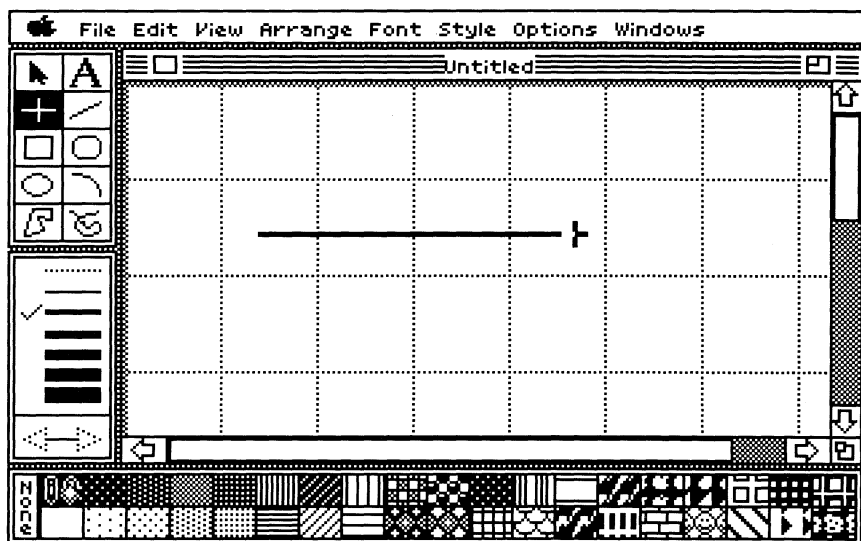
Any changes made to a text object will affect the entire object. For example, if you highlight just one word of a text object and choose Bold from the Style Menu, the entire object, not just the word that was highlighted, would be made bold.

### Horizontal/ Vertical Lines



The horizontal/vertical line tool lets you draw lines that will always be parallel to the edges of the document window.

To place a horizontal or vertical line in your document, you'll create a line object with the horizontal/vertical line tool. Select the horizontal/vertical line tool from the tool palette, and the pointer will change to a **crossbar** pointer. Place the crossbar pointer at the position in the document where you want to start the line. Next, press and hold the mouse button as you drag the pointer to the place where you want to end the line. You'll see the line stretch between the starting point and the vertical or horizontal position of the crossbar pointer as you draw. (Because the line will be either horizontal or vertical, the pointer may be disconnected from the actual endpoint of the line.)

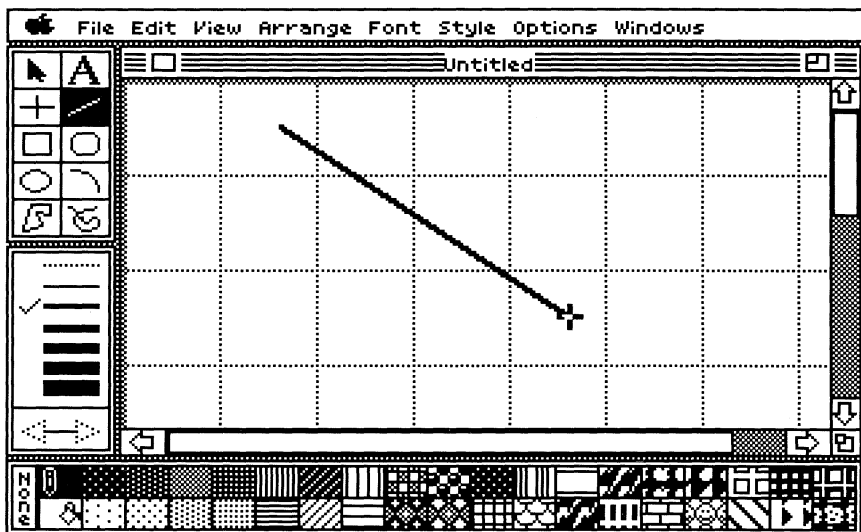


When you've positioned the crossbar on the spot where you want the line to end, release the mouse button to complete the object.

### Diagonal Lines



The line tool allows you to draw diagonal lines of any angle in your document.



Select the line tool from the tool palette, and the pointer will change to a **crossbar** pointer. Place the pointer at the position in the document where you'd like to start the line. Next, press and hold the mouse button to drag the pointer to the place where you want the line to end. You'll see the line stretching between the starting point and the crossbar pointer as you draw it. When you've positioned the pointer on the place in the document where you want the line to end, release the mouse button to complete the object. You can constrain a diagonal line to either a 45 or 90 degree angle by holding down the *shift* key as you draw it.

### Rectangles/ Squares



The rectangle tool allows you to draw rectangles and squares in your document.

To create a rectangular object, select the rectangle tool from the tool palette. The pointer will change to a crossbar pointer. Place the pointer at the position in the document where you'd like to start one corner of the rectangle. Press and hold the mouse button as you drag the pointer to the place where you want the opposite corner of the rectangle. You'll see two lines stretching from the starting point to the horizontal and vertical positions of the cursor, and then two other lines that complete the rectangle by stretching from the pointer to the endpoints of the first two lines. When you've positioned the pointer on the spot where you want the opposite corner of the rectangle, release the mouse button to complete the object. To create a square, hold down the *shift* key as you draw with the rectangle tool.

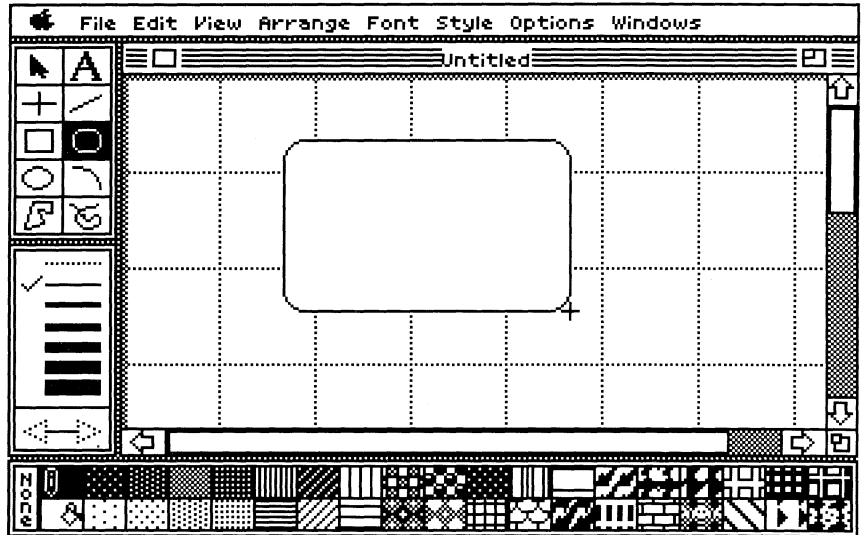
### Rounded Rectangles



The rounded rectangle tool lets you draw rounded rectangles and squares.

To create a rounded rectangle, select the rounded rectangle tool from the tool palette, and the pointer will change to a crossbar pointer. Place the pointer at the position in the document where you'd like to start one corner of the rounded rectangle. Press and hold the mouse button as you drag the pointer to the place where you want the opposite corner of the rounded rectangle to appear. You'll see two lines, connected by a rounded corner, stretching from just beyond the starting point to the horizontal and vertical positions of the cursor, as well as two other lines that complete the rounded rectangle by stretching from just inside the pointer to the rounded endpoints of the first two lines.





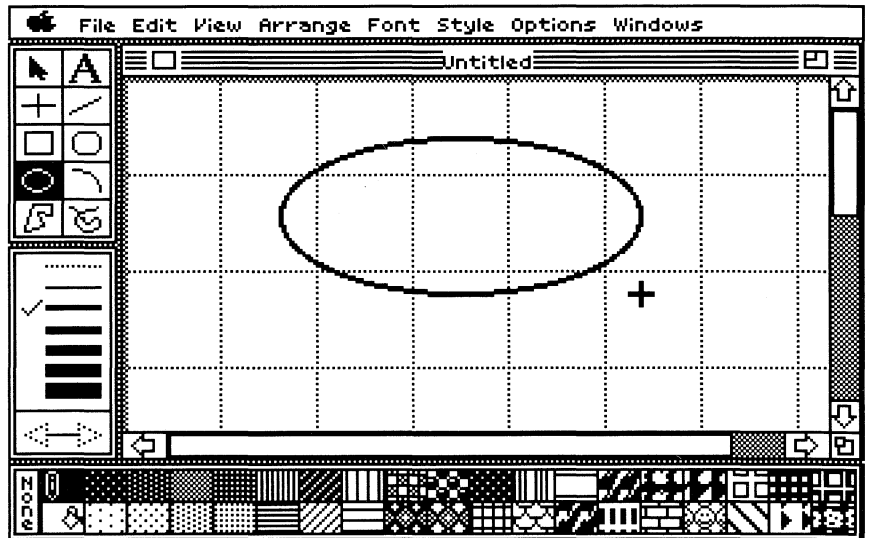
When you've positioned the pointer on the spot where you want the opposite corner of the rounded rectangle to appear, release the mouse button to complete the object. To create a rounded square hold down the *shift* key as you draw with the rounded rectangle tool.

## Ovals/Circles



You can create ovals and circles with the oval tool.

The best way to understand how ovals are drawn is to think of them as invisible rectangles that contain ovals. Ovals are drawn in much the same way as rectangles. Select the oval tool from the tool palette, and the pointer will change to a crossbar pointer. Place the pointer at the position in the document where you'd like to start one "corner" of the oval to appear. Next, press and hold the mouse button as you drag the pointer to the place where you want the opposite "corner" of the oval. You'll see the oval stretching between the starting point and the pointer as you move the mouse.



When you've created the oval you want, release the mouse button to complete the object.

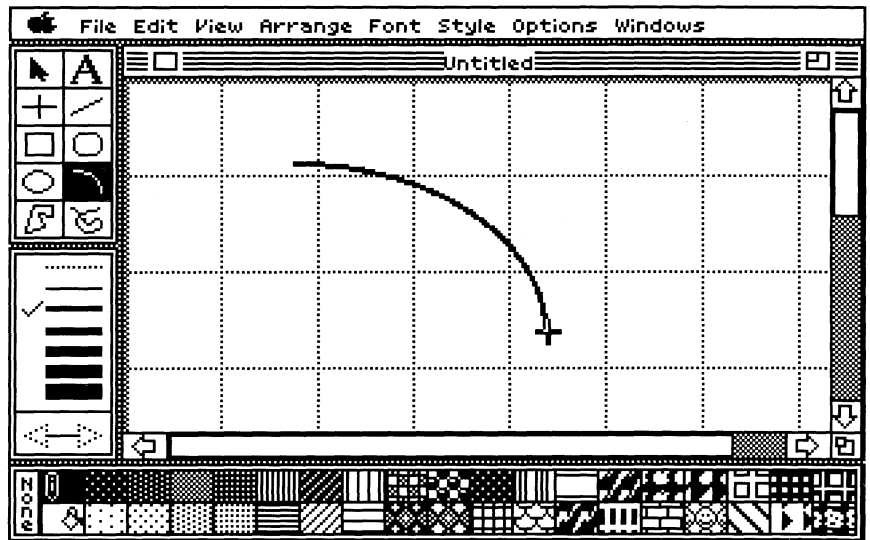
To create a circle, hold down the *shift* key as you draw with the oval tool.

## Arcs



The arc tool allows you to draw 90 degree arcs in your document.

To create an arc, select the arc tool from the tool palette. The pointer will change to a crossbar pointer. The best way to understand how arcs are drawn is to think of them as a quarter of an oval contained in an imaginary rectangle. Arcs are drawn, then, in much the same way as ovals, with the arc stretching from the starting point to the pointer. Place the pointer at the position in the document where you'd like to start one endpoint of the arc. Next, press and hold the mouse button as you drag the pointer to the place where you want the other endpoint of the arc. You'll see the arc stretching between the starting point and the pointer as you move the mouse.



When you've positioned the pointer on the spot that creates the arc that you want, release the mouse button to complete the object.

Hold down the *shift* key as you draw arcs, and they will be constrained to quarter circles.

You can change the number of degrees an arc spans by selecting the arc, choosing the Edit Arc Angles command from the Edit Menu, and dragging one of the handles on the endpoints of the arc.

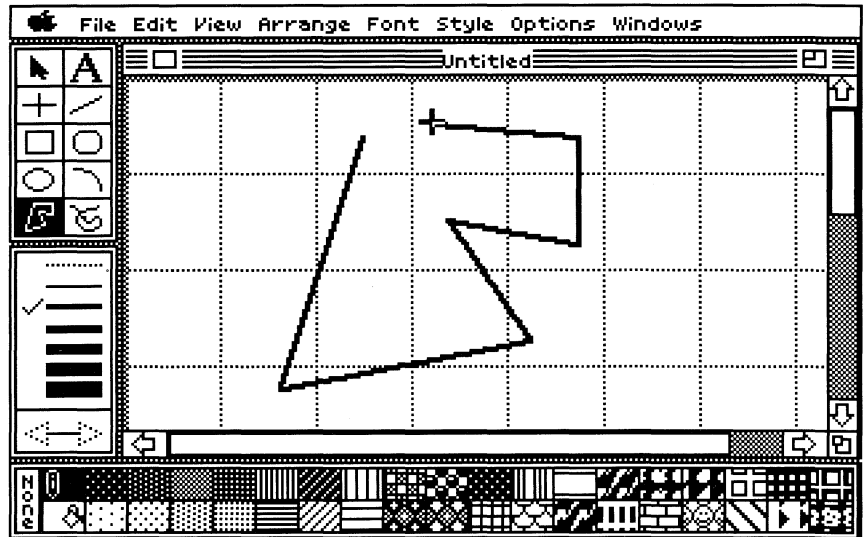
## Polygons



The polygon tool lets you draw a polygon of any shape and with an unlimited number of points.

To place a polygon in your document, select the polygon tool from the tool palette and the pointer will change to a crossbar pointer. Position the pointer at the place in the document where you'd like to start the first line of the polygon. Click the mouse button and then move the pointer to the place where you want the line to end. You'll see the line stretching between the starting point and the crossbar pointer as you draw it. When you've positioned the pointer on the spot where you want the line to end, click the mouse button to complete the first line.

As you move the pointer, a line will stretch from the endpoint of the first line to the pointer. Continue creating the polygon by clicking the mouse at any point where you'd like to place a vertex.



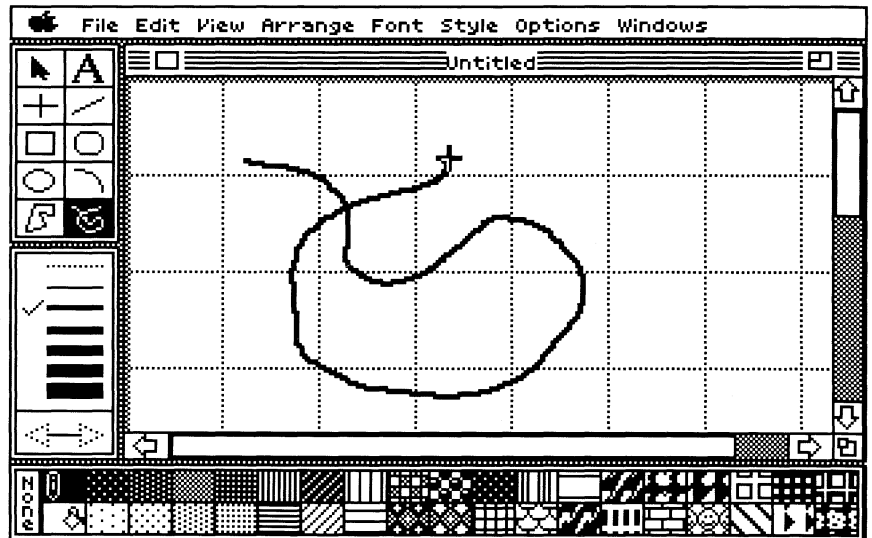
The polygon can be completed by double-clicking on any point, clicking outside the document window, or by clicking on the starting point. By holding down the *shift* key as you draw with the polygon tool, its lines will be constrained to either 45 or 90 degree angles.

## Freehand Shapes



The freehand tool allows you to draw smooth, free-form objects in your document.

To place a freehand shape in your document, select the freehand shape tool from the tool palette. The pointer will change to a crossbar pointer. Position the pointer at the place in the document where you'd like to start the object, then drag the pointer to form the shape that you want to create. You'll see the smooth line of the object as you draw it.



You can complete the object by releasing the mouse button. If the ends of a freehand shape are not connected, only the part of the object that you actually draw will have a border. Freehand shapes use more of TopDraw's memory than other objects do, so use them only when they're necessary.

## The Line Palette



The line palette lets you choose lines from a predefined set of line sizes.

To pick one of the standard TopDraw line sizes, select the desired line size with the pointer. The new line size will replace the current line size, which is indicated in the palette by a check mark to the left of the selected line size. No check mark will appear if the line size has been edited with the Line Size command and doesn't exactly match one of the predefined line sizes. (For more information on this command, see "Line Size" in this chapter.) The lines in the line palette appear on your screen at normal scale. Changes you make to the line size will appear scaled according to the amount of enlargement or reduction you're using in the document.

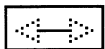
When you select an object, a check mark appears in the line palette beside the line size of the object. If several objects with varying line sizes are selected, or if the object's line size has been modified to a line size not offered in the line palette, no check mark appears.

You can choose to have objects without borders by selecting the dotted line in the line palette.

To move the Line Palette anywhere within the document window, place the arrow pointer along the border of the line palette, hold the mouse button down, and move the palette to the position you want.

By choosing the Clean Up Windows command in the Windows Menu, you can quickly restore the line palette to its original position.

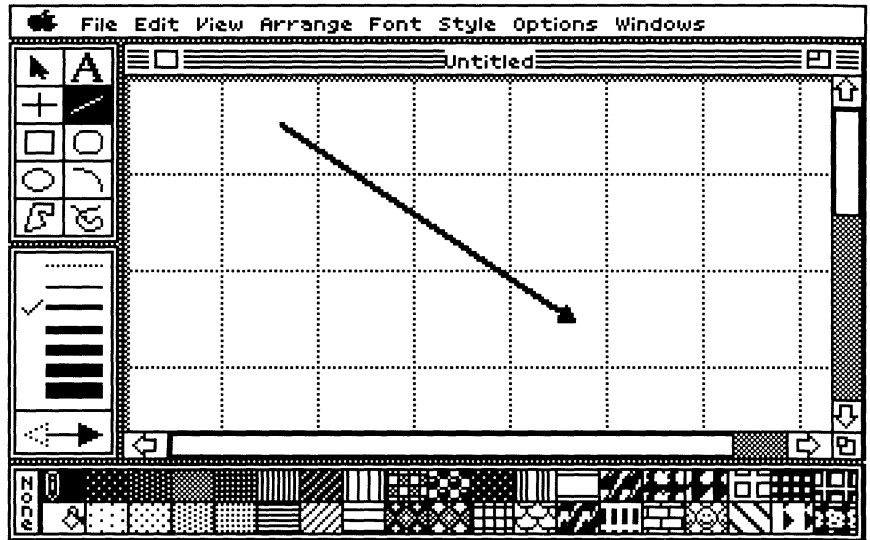
## Arrowheads



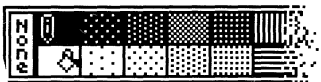
The arrowhead selection box lets you add arrowheads to the endpoints of lines and open objects (objects that have two endpoints that don't overlap).

To add arrowheads to a line or open object, select the placement of the arrowheads from the arrowhead selection box. Selecting the left arrow will add an arrowhead to the left endpoint of your object, selecting the right arrowhead will add an arrowhead to the right endpoint, and selecting both arrowheads will add arrowheads to both endpoints.

To add arrowheads to a previously drawn object, select that object and then choose the appropriate arrowheads from the arrowhead selection box.



### The Pattern Palette



The pattern palette lets you select the different line and fill patterns that you use in drawing with TopDraw. By dragging the pen icon and the paint bucket icon, you can change the line and fill patterns of any object in TopDraw.

When an object is selected, the pen icon and paint bucket icon on the pattern palette automatically move to the line pattern and fill pattern of that object.

To move the pattern palette anywhere on the screen, place the arrow pointer tool along the border of the pattern palette, hold the mouse button down, and drag the palette to the position you want. By choosing the Clean Up Windows command in the Windows Menu, you can restore the pattern palette to its original position. If you want to completely remove the pattern palette from the desktop, you may do so by choosing the Hide Patterns command in the Windows Menu. The Clean Up Windows command does not change the visibility of the pattern palette.

## Pen Icon



The pen icon lets you select the line or border pattern for an object. When you select an object, the pen icon will jump to the object's current pattern or color on the pattern palette.

To select a line pattern for an object, drag the pen icon to the pattern that you want to use, or click on the left side of the desired pattern box. The pen icon will automatically jump to the selected pattern.

To change the line color of a previously drawn object, select that object and drag the pen icon to the pattern you want to use or click on the left side of the desired pattern. If you want an object without a border, select the dotted line on the line palette.

**Note:** If you have more than one object selected and the border patterns are different, the pen icon will disappear.

## Paint Bucket Icon



The paint bucket icon allows you to select the fill pattern for an object. When you select an object, the paint bucket icon will jump to the object's current fill pattern on the pattern palette.


To select a fill pattern for an object, drag the paint bucket icon to the pattern that you want to use as a fill color. You can also select a fill pattern by clicking on the right side of the desired pattern box. The paint bucket icon will automatically jump to that pattern.

To change the fill color of a previously drawn object, select that object and move the paint bucket icon to the pattern that you want to use or click on the right side of the pattern box.

**Note:** If you have more than one object selected and the fill patterns are different, the paint bucket icon will disappear.



## Menu


The  Menu provides information about TopDraw and gives you access to any desk accessories installed in the system folder of the current startup disk.


### ■ About TopDraw...

The About TopDraw command displays a dialog box which tells you the version number of your TopDraw program disk, as well as the names of the authors of the program.

To return to TopDraw after viewing the About TopDraw information, click the mouse button.

### ■ Desk Accessories

Any desk accessories installed in the system folder of the current startup disk can be accessed from the  Menu.

To run a desk accessory, choose it from the  Menu.

## File Menu

The File Menu contains commands that are used in file management, as well as commands for printing documents.

### ■ New

The New command creates an empty TopDraw document that uses the standard default settings. See "Save Defaults" in this chapter for information on changing these defaults so that they'll always begin modified to your preferences.

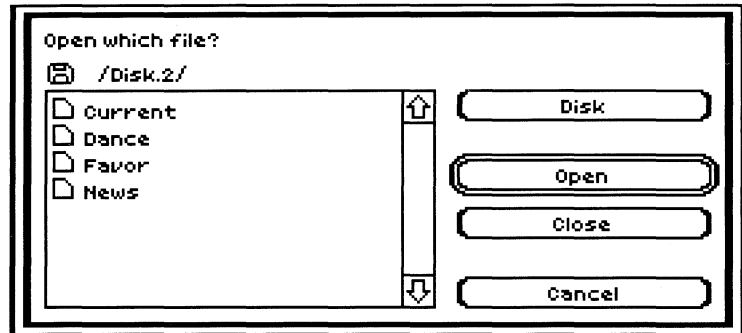
If there's an unsaved document in memory at the time New is chosen, a dialog box appears to ask if you want to save the document before opening a new one. To save your changes, click on the Yes button, or click the No button to close your document without saving it. If you decide not to open a new document, just click the Cancel button and you'll return to TopDraw without affecting your document.

## ■ Open...

The Open command lets you retrieve files that you've created and saved.

When you choose Open, a dialog box appears, asking you to choose the document that you'd like to open from a list of documents available on the current disk. You can scroll the list by pressing the arrows on the scroll bar. If you'd like to choose a document from a different disk, click on the Disk button and TopDraw will check all disks that are on-line and proceed to the next one. To open a document from a folder, select the folder and click the Open button. If you don't find the document there, you may close the folder by clicking on the Close button.

Choose the document that you'd like to open by clicking it and then clicking the Open button.



If there's an unsaved document in memory at the time Open is chosen, TopDraw will ask if you want to save the document before displaying the Open dialog box.

## ■ Close

The Close command lets you close the current document.

If you try to close a document with unsaved changes, TopDraw will display a dialog box asking if you want to save your changes before closing the document.

Choosing Close is identical to clicking a document's close box.

## ■ Save

The Save command writes a copy of the current document to disk. If you're saving a new, untitled document, a dialog box appears to let you name the document (see "Save As" for an explanation of this dialog box). If you give the new, untitled document the name of a document already saved on that disk, a dialog box appears, asking if you want the document you're saving to replace the old document of the same name already on disk. Clicking Yes on this dialog box saves the document under the name you specify. Clicking No returns you to the previous dialog box to give the untitled document another name.

When you've named and saved the document, a copy of the document is written on disk and its name appears in the title bar of the document window.

After you've opened or created a document and saved it, the next time you save that document a dialog box will appear to tell you the file is being saved.

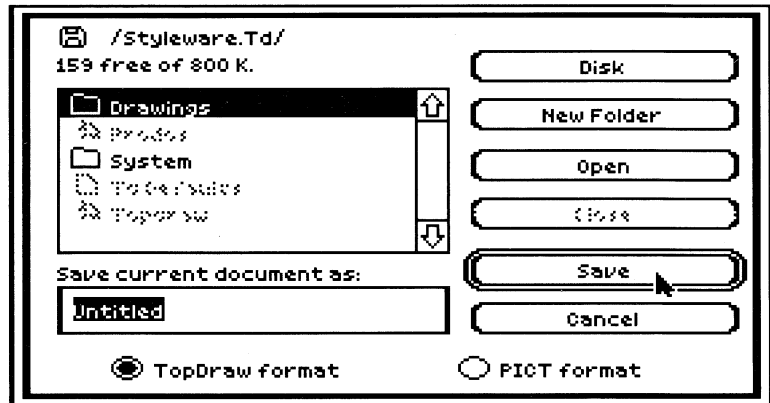
You'll want to use the Save command when you want to save an updated version of the current document on disk. You'll use Save As when you want to save a changed document with a new name while retaining the old version of the document under its existing name or to make a backup or copy of an existing document with a different path or document name from the original.

**Save early, save often:** you should save documents as you work, to guarantee that you have a copy of the most recent version of your document on disk.

## ■ Save As...

Save As lets you save the current document with a different name or to a different disk.

When you choose Save As, a dialog box appears.



The Save As dialog box contains the name of the current disk, the amount of space left on the disk, and a list of TopDraw documents and directories on the disk. Documents are represented by document icons to the left of their names, directories by folder icons. The dialog box also contains an input bar for the document name and radio buttons for specifying the format with which the document is to be saved, TopDraw or PICT. TopDraw format saves documents to be used exclusively with TopDraw. PICT format is the Apple standard format for producing graphic documents. You can transfer pictures you've saved in PICT format to MultiScribe GS using the MultiScribe GS Load Picture command or bring a document saved with PICT format into a TopDraw document with the TopDraw Load Picture command (PICT graphics are treated by both MultiScribe GS and TopDraw like bit-mapped graphics).

The name in the input bar is highlighted. If you're saving a new document, the name in the input bar is "Untitled." If you're saving a document that has already been named and saved on disk, the input bar contains the current document name. If you want to save the document under a different name, enter a new name in the input bar. When the input bar contains the document name, click the Save button. The document is saved to disk. To cancel the operation and return to the document window, click Cancel.

## ■ Revert

The Revert command removes all changes made since the last save by reopening the last saved version of your document. When you choose Revert, a dialog box appears, asking you to confirm or cancel your choice. TopDraw will ask for the disk on which the document was saved.

**Note:** Be sure you really want to use Revert before you choose it, because Revert cannot be undone.

## ■ Load Picture...

The Load Picture command lets you load color bit-mapped files into TopDraw. You can use this command to load files from paint programs, such as PaintWorks Plus and Deluxe Paint II.

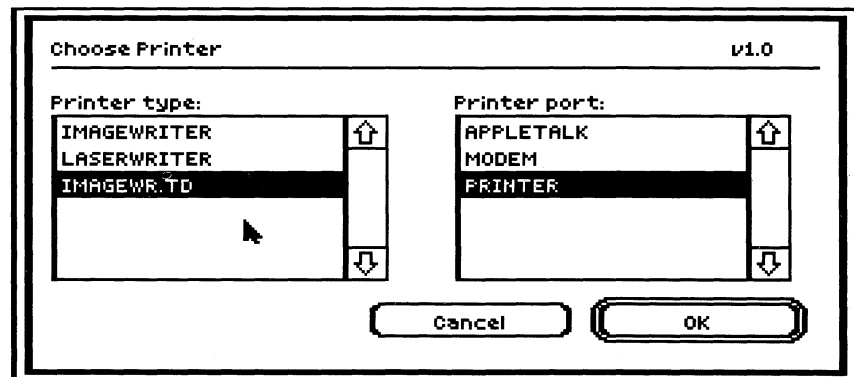
When you choose Load Picture a dialog box appears listing all the bit-mapped picture files on the current disk. Click the name of the picture document you want to open. Click Open to load the selected picture document. A copy of the selected picture appears in the document window.

A bit-mapped picture loaded into TopDraw is treated like a bit-mapped picture contained in a rectangular object and can therefore be edited like any rectangle in TopDraw.

## ■ Choose Printer...

The Choose Printer command tells TopDraw what printer and printer port you're using. Once you've provided these specifications, you won't have to choose this command again until you change your printer or the printer port you're using.

When you choose the Choose Printer command, a dialog box appears on the screen.



The Choose Printer dialog box contains two lists—a printer list and a printer port list. Click the name of the printer and printer port you're using; scroll the lists using the scroll arrows, if necessary.

*If you're using a LaserWriter, be sure to select AppleTalk as your printer port specification.*

When you've made your selection, click OK or press *return*. Your specifications are saved to your TopDraw disk. Clicking Cancel cancels the operation.

**Note:** When you use Choose Printers to change the specified printer remember to follow with the Page Setup command to set the page size correctly.

The Page Setup command lets you specify the size of the paper you'll be printing on, whether it will be printed vertically (portrait) or horizontally (landscape), and whether you want it printed with "special effects," such as 50% reduction.

When you choose Page Setup, a dialog box appears. This dialog box differs depending on the printer drivers you've installed on the system path (system folder) of your startup disk and the printer and port you've chosen with the Choose Printer command (see "Choose Printer..." in this chapter). If there's no printer driver on your startup disk, a warning dialog box appears.

If you're using an ImageWriter printer, the following dialog box appears. Change setup options by clicking the appropriate settings.

## ■ Page Setup...

8-1/2 inches by 11 inches

8-1/2 inches by 14 inches

International standard:

8-1/4 inches by 12 inches

European standard:

8-1/4 inches by 11-2/3 inches

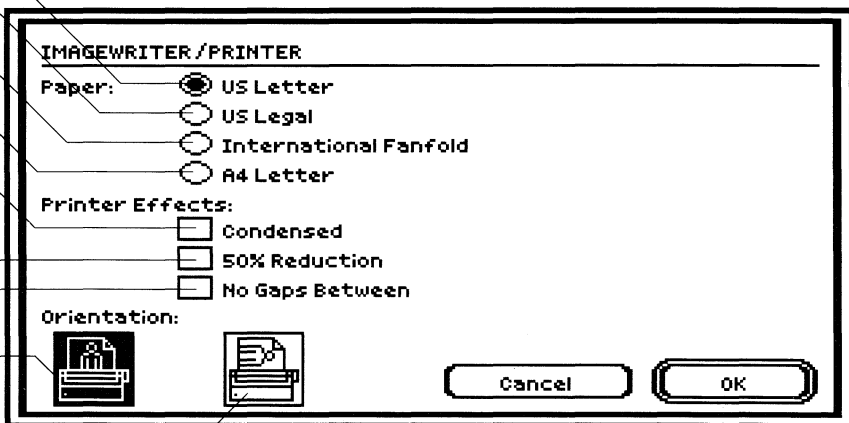
Prints at 50% of original size horizontally and vertically

Prints at 50% of original size vertically

Prints continuously, without skipping over page breaks

Prints vertically on the page

Prints sideways on the page, with the top line across the right margin of the page



The first time you choose Page Setup, the options are preset to US Letter and vertical orientation, with no special effects. Any changes you make to these settings are saved when you save the document.

When you've chosen the Page Setup you want, click OK or press *return*. Clicking Cancel or pressing *esc* cancels the Page Setup operation and leaves your old settings intact.

If you're using a LaserWriter, a different dialog box appears.

8-1/2 inches wide  
by 11 inches tall

8-1/2 inches wide  
by 14 inches tall

Prints vertically on the page.

Prints sideways on the page,  
with the top of document across  
the right margin of the page

Smooths out the rough edges of  
graphics and non-LaserWriter  
fonts

Substitutes fonts built into the  
LaserWriter for regular fonts.

Normal vertical sizing:  
80 dpi (dots per inch)  
wideby 36 dpi tall

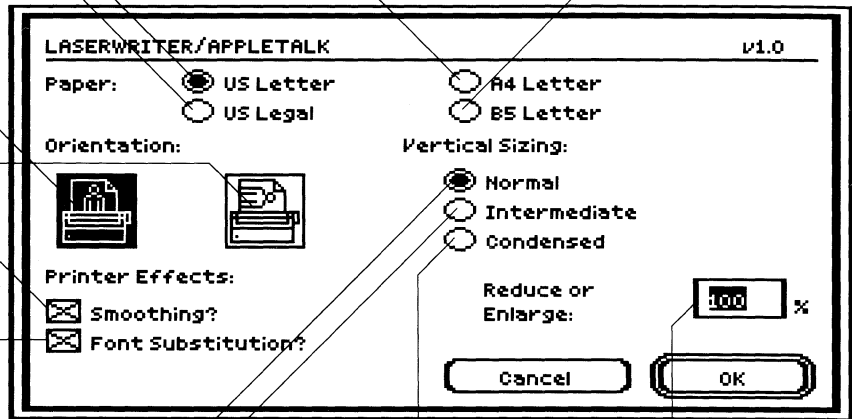
Intermediate vertical sizing:  
80 dpi wide by 54 dpi tall

Condensed vertical sizing:  
80 dpi wide by 72 dpi tall

Reduces or enlarges  
drawing by the percentage  
you specify

European standard:  
8-1/4 inches wide  
by 11-2/3 inches tall

A Japanese standard:  
7-1/4 inches wide  
by 10-1/4 inches tall



The first time you choose Page Setup, the options are preset to US Letter, vertical orientation, and normal vertical sizing, with both Smoothing and Font Substitution selected and 100% scaling. Any changes you make to these settings are saved when you save the document. Opening another document changes the page setup to the settings saved with the document, or, in the case of a new document, the default settings.

Selecting Font Substitution causes the following font substitutions:

- New York becomes Times
- Geneva becomes Helvetica
- Monaco becomes Courier
- Shaston becomes 6 point Helvetica

All other non-LaserWriter fonts are printed as bit-mapped graphics. If you choose to print without font substitution and you're using LaserWriter fonts, printing time will increase. Choosing Smoothing will speed up printing and make non-LaserWriter fonts look better.

Selecting the condensed or intermediate vertical sizing settings in the LaserWriter dialog box as a part of your page setup will make the vertical ruler on your screen appear longer although objects will not change. Using these settings, the objects in your printed version will be compressed.

You can, however, add proportionately correct squares and circles to a condensed or intermediate document by holding down the *shift* key as you draw with the rectangle or oval tool. The circles/squares will appear stretched vertically on your screen, but will be proportionately accurate in the printout.

Once you've chosen the Page Setup you want, click OK or press *return*. Clicking Cancel or pressing *esc* cancels the Page Setup operation and leaves your old settings intact.

## ■ Print Normal...

The Print Normal command prints a copy of the current document according to the normal scale specifications. This setting is 1.0 (see "Normal Scale" in this chapter). If you've been working with a reduced or enlarged version of a document, choosing Print Normal will produce a document of normal scale without converting the current scaled version on your screen.

If you haven't chosen a printer, the preset printer is ImageWriter and the preset port is Printer.

If you're printing with an ImageWriter printer, the following dialog box appears when you choose the Print command (the default settings are those shown). Once you've selected the settings you want, click OK or press *return*. Clicking Cancel or pressing *esc* cancels the operation.



Uses reduced pixel size to produce better looking text.

Increase pixel size for better looking color. Prints text exactly as it appears on screen.

Prints text only, without different fonts, sizes, or styles

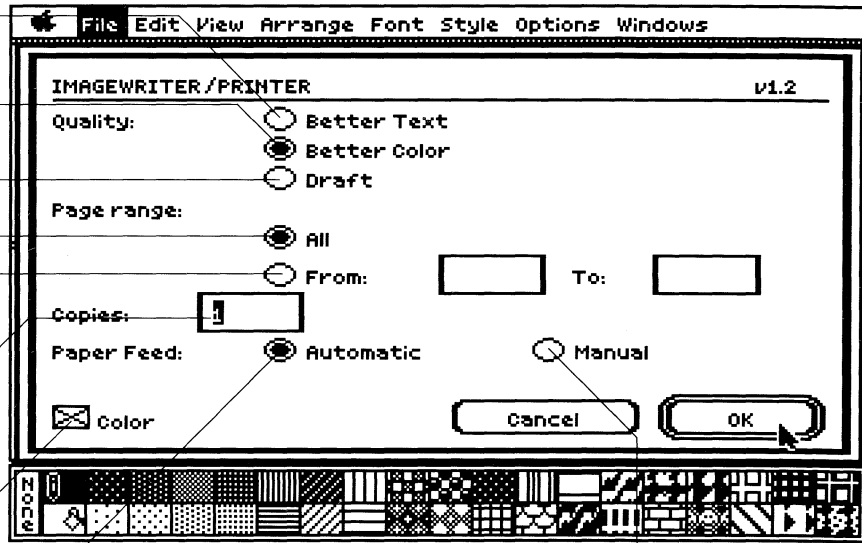
Prints all the pages in a document, from first to last

Prints the range of pages you specify.

Prints the specified number copies of a document.

When selected, this setting uses the color ribbon on your Imagewriter to print in color.

Prints tractor-feed paper fed continuously into the printer.



Prints one sheet at a time. Prompts you to feed each sheet into the printer individually.

If you're printing with a LaserWriter printer, the following dialog box appears (the default settings are those shown below).

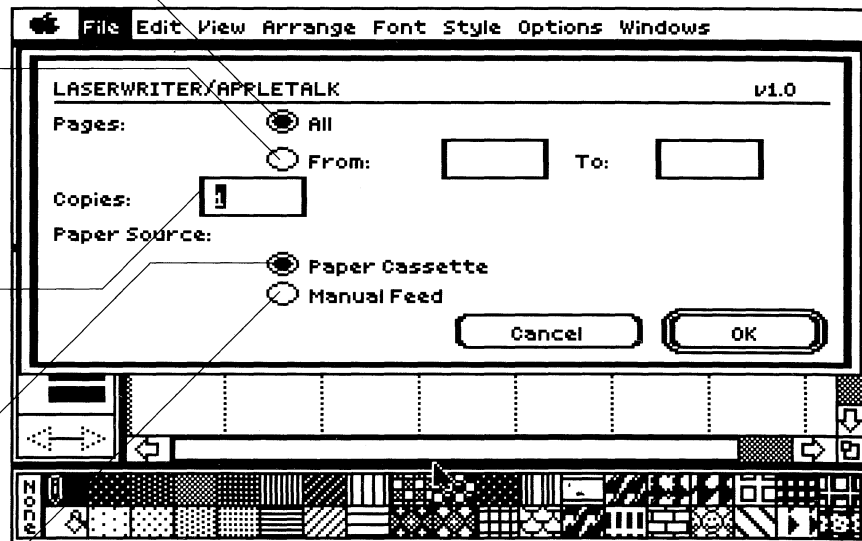
Prints all the pages in a document, from first to last.

Prints the range of pages you specify. Select the insertion point in the input bar and type the numbers for the first and last pages of the range you want to print.

Prints the specified number of copies of a document. Select the insertion point in the input bar and type the number of copies you want to print.

Specifies that you'll feed the paper into the LaserWriter manually.

Specifies automatic feed from the LaserWriter's paper cassette.



Once you've selected the settings you want, click the OK button or press *return*. To cancel the command, click Cancel or press *esc*.

## ■ Print Scaled...

When working with a document that has either been enlarged or reduced, you can print the scaled version of your document by using the Print Scaled command. Choose Print Scaled from the File Menu while you have the reduced or enlarged version of your document on the screen. The Print dialog box appears, allowing you to specify how you want your document printed; this dialog box differs depending on whether you're using an ImageWriter or LaserWriter.

For a discussion of the Print dialog box, see "Print Normal..." in this chapter.

## ■ Quit

The Quit command lets you quit TopDraw and exit to your startup program—the IIGS DeskTop or the Program Launcher.

If you've made unsaved changes to the current document, a dialog box appears, asking if you want to save the most recent version of the current document before quitting.

## Edit Menu

On the Edit Menu you'll find the standard Apple IIGS editing commands—Undo, Cut, Copy, and Paste. These commands make use of the Clipboard, where cut or copied objects are stored. The Edit Menu also includes commands for clearing selected objects. In addition to these standard commands TopDraw contains additional special commands for editing objects.

## ■ Undo

The Undo command lets you reverse the effects of the last change made in a document. To undo a change, you must choose Undo immediately after performing the change. Operations that can be undone with the Undo command are:

- Using the Clear command
- Moving any object(s)
- Stretching any object(s)
- Flipping any object(s)
- Rotating any object(s)
- Changing the fill pattern of any object(s)
- Changing the line pattern of any object(s)
- Changing the line size of any object(s)
- Aligning objects
- Aligning objects to grid
- Editing of corner radius

## ■ Cut

The Cut command removes selected objects from a document and stores the selected material on the Clipboard, replacing the Clipboard's current contents. The cut material remains on the Clipboard until the next Cut or Copy task is performed.

This command may be used only when you've selected objects and otherwise remains dimmed.

## ■ Copy

The Copy command allows you to place a copy of any selected object or group of objects onto the Clipboard, replacing the Clipboard's current contents.

The Copy command is useful when you want to use an object more than once in the same document or select an object from one document and place it in another. (See "Duplicate" in this chapter for information on making multiple copies of an object or group of objects.)

After selecting the object(s), choose Copy and the objects will be copied to the Clipboard.

## ■ Paste

The Paste command places the contents of the Clipboard into the current document.

After you've selected and cut or copied an object or objects, use the scroll bar to move to the area in the document where you want to place the object(s). Choose Paste from the Edit Menu and the object or objects will be placed in the center of the document window.

Since text is treated as an object, it can be pasted like any other object. However, when you cut or copy only part of a text object, the cut or copied text must be placed onto another text object.

## ■ Clear

The Clear command lets you clear selected objects from a document without placing them in the Clipboard.

When you choose Clear, all selected objects are deleted from the current document. This command can be undone with the Undo command.

## ■ Duplicate

The Duplicate command makes a copy of an object (or objects) and places it in the document in front of and to the right of the selected object. In effect, Duplicate performs a Copy command and then a Paste command.

To use the Duplicate command, select the object or objects that you want to make a copy of and then choose Duplicate. A copy of the selected object will be placed on top of the old object or objects. You can then move the new object anywhere on the screen and edit it as you would any other object.

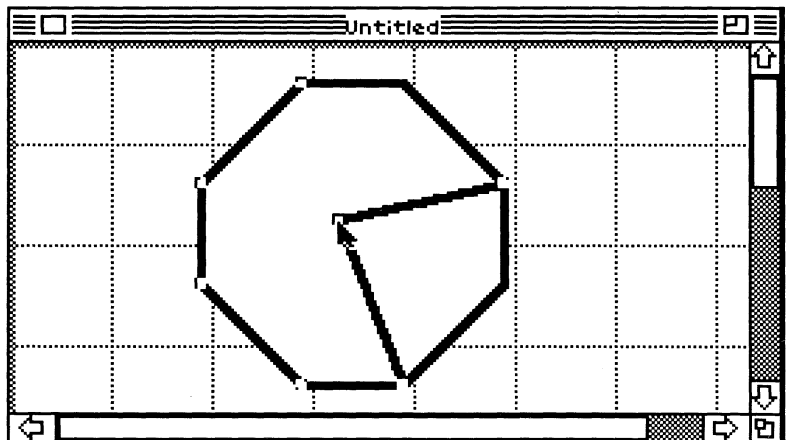
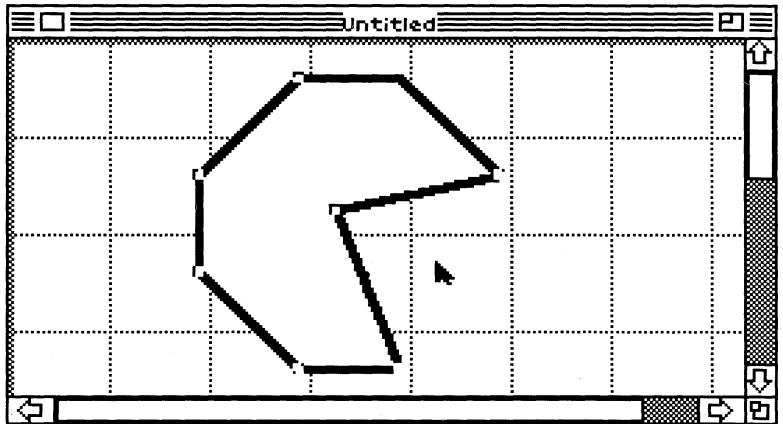
## ■ Select All

The Select All command lets you select all objects in a document in one step. All selected objects are treated as one object and any operations performed affect all the objects.

## ■ Edit Polygon Points

The Edit Polygon Points command is used to change the shape of a polygon and can only be used when a polygon or freehand shape is selected. If an object other than a polygon or freehand object is selected, the Edit Polygon Points command will remain dimmed.

To reshape a polygon, select the object and then choose Edit Polygon Points. The normal object handles will be replaced by handles for the individual points of the polygon. Use the pointer to move the individual points on the object as you move the handles of any object. Two lines or smoothed curves will stretch from the two adjacent points of the point you're moving, showing you how the finished object will look when you release the mouse button.



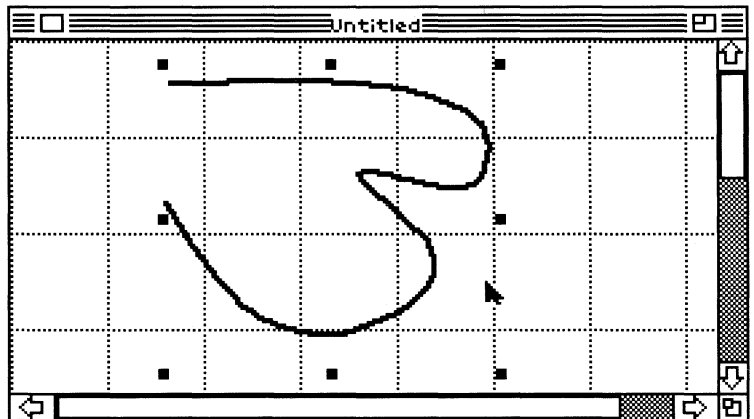
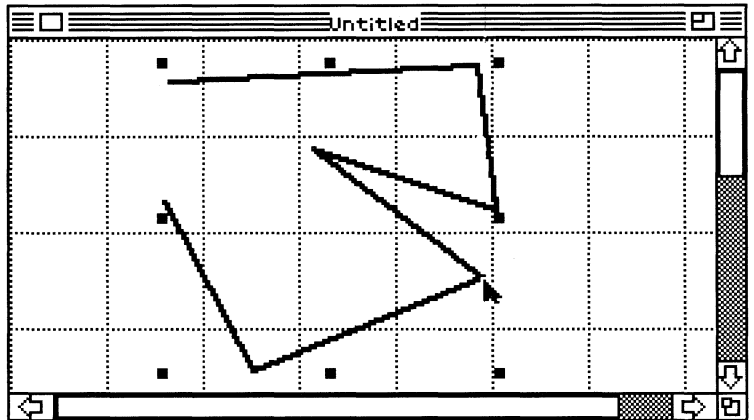
## ■ Edit Arc Angles

The Edit Arc Angles command is used to change the shape of a previously created arc. This command can only be used when an arc is selected. The curved part of the arc will move in a circular path as you move the pointer. If Show Dimensions is selected, the number of degrees that the arc should span will be displayed to the right of the pointer.

## ■ Smooth Polygon

The Smooth Polygon command allows you to smooth the edges of a previously drawn polygon or freehand shape.

To smooth a polygon, select it and choose the Smooth Polygon command. The normal polygon will be smoothed, with curved lines replacing straight ones. In a freehand shape, the curvature of lines will be made smoother.



The best way to understand the effects of smoothing is to experiment. Try smoothing some polygons and freehand shapes, and soon you'll have a clear understanding of the things that smoothing can do.

## ■ Unsmooth Polygon

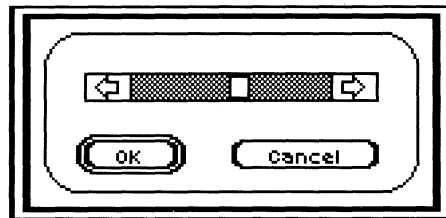
The Unsmooth Polygon command removes the effects of smoothing from a polygon or freehand shape.

To use the Unsmooth Polygon command, select a smoothed polygon and choose Unsmooth Polygon.

## ■ Corner Radius...

The Corner Radius command allows you to change the curvature of the corners of any rounded rectangle. It can also be used to round the corners of rectangles and squares.

When you choose the Corner Radius command a dialog box appears that shows you a scroll bar and a sample rounded rectangle. Pressing on the scroll arrow buttons controls the amount of curvature on the corners of the sample rectangle. Move the box in the scroll bar back and forth until the the sample rectangle has the corner roundness you want, and then click the OK button. The corners of any selected rectangles, whether created with the rounded rectangle tool or not, will be changed to the roundness that you specify, and any rounded rectangles you subsequently create will have corners rounded according to your specifications.

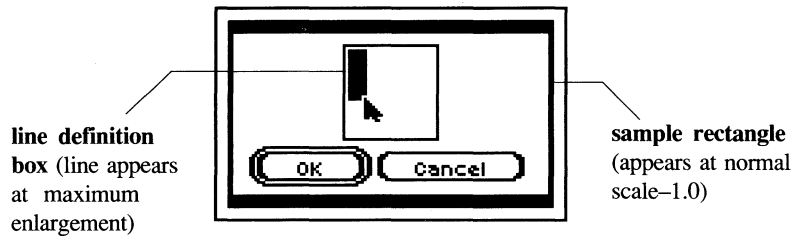


If you decide not to change the corner radius, click the Cancel button and you'll return to TopDraw without making any changes.

**Note:** The sample you see in the dialog box appears on your screen at normal scale. If you're working on an enlarged or reduced document the roundness of the corners you see will be the scaled version of the example rounded rectangle in the dialog box.

## Line Size...

The Line Size command lets you edit the line size you use for drawing objects in TopDraw. Changes can also be made to previously drawn objects and/or lines in a TopDraw document. Use this command to create a line size that is not contained in the Line Size box.



When you choose the Line Size command, a dialog box appears. The dialog box contains a sample rectangle and a line definition box. The line definition box contains a line that can be edited to change the line size. The sample rectangle shows you how changes to the line size will appear in your drawing. To create a custom-sized line for your drawing, use the pointer to change the line in the line definition box to the desired size. Dragging the line down, vertically, will affect the horizontal lines of squares and rectangles, and the top and bottom areas of circles or ovals. Dragging it out, horizontally, will widen the vertical lines of squares and rectangles, and the side areas of circles and ovals.

When you've defined the line size you want, click the OK button to set your changes and return to your drawing. If you decide not to change the line size setting, click the Cancel button and you'll return to TopDraw without making any changes.

To change the line size of previously drawn objects, select the object(s) you want to edit and choose Line Size. By using the line definition box as described above, line size can be changed.

If you change the line size of an object to a non-standard size (one not shown in the line palette), no check mark will appear in the line palette when that object is selected.

**Note:** The line-size sample rectangle you see in the dialog box appears on your screen at normal scale. If you're working on an enlarged or reduced document, when you click OK you'll see in your document the scaled version of the line size of the example rectangle in the dialog box.



## View Menu

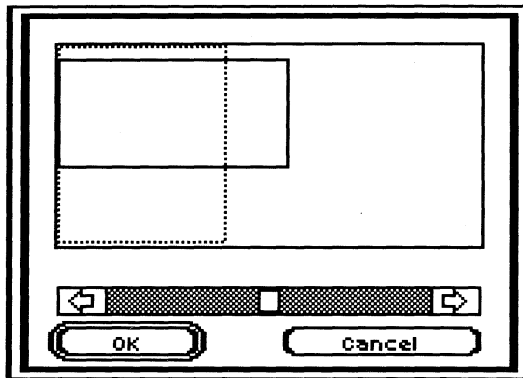
The View Menu contains commands that let you change the actual scale and size of your document. The enlarge commands (Enlarge, Maximum Enlargement) reduce the size of the view screen, which makes objects in your document appear larger. The reduce commands (Reduce, Reduce to Fit) enlarge the size of the view screen, making objects in your document appear smaller. The scale size appears in the information bar at the top of your document window. The scale factor for a document is dependent on the size of the document.

### ■ Set View...

The Set View command is used to change the view of a document to an exact setting of your choice and to place the document window anywhere within the total area of the document.

If you need greater control over the view scale of your document than the reduce and enlarge commands provide, use the Set View command to get a viewing size of your choice instead of incrementing and decrementing the **view scale** one step at a time.

When you choose the Set View command, a dialog box appears on the screen.



The Set View dialog box contains a gray rectangle, which represents the document window. The red lines represent the pages in your document. To change the view scale, click the arrow buttons on the scroll bar. This will enlarge or reduce the document window. Move the document window anywhere within the document by dragging the rectangle to the desired position.

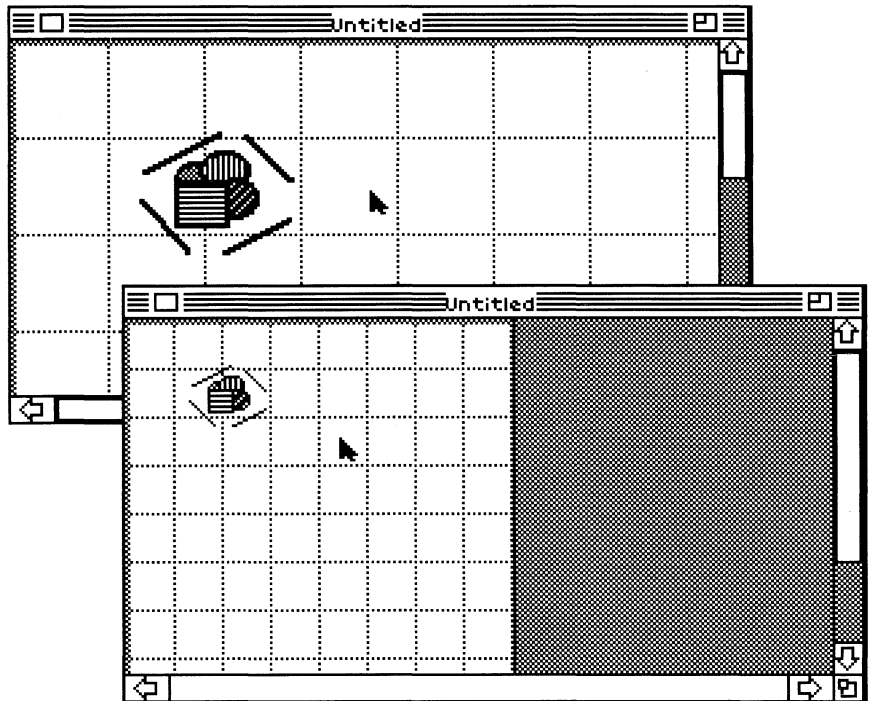
After your changes are made, click the OK button to return to TopDraw. If you decide not to make changes to the view scale, click the Cancel button and you'll return to TopDraw without affecting your document.

#### ■ Reduce to Fit

The Reduce to Fit command is used to change the view of a document so that the entire document will be displayed in the document window. This command lets you see the document at the largest possible scale value depending on the size of the document.

#### ■ Reduce

The Reduce command is used to make the size of the document window larger, to allow you to see more of the document at one time.



When you choose the Reduce command, the view of the document "zooms out" one step. If you use the Reduce command again, the view will zoom out another step, unless you've reached the smallest scale. (See "Reduce to Fit", in this chapter.)

If you need even more control over the view of your document, use the Set View command.

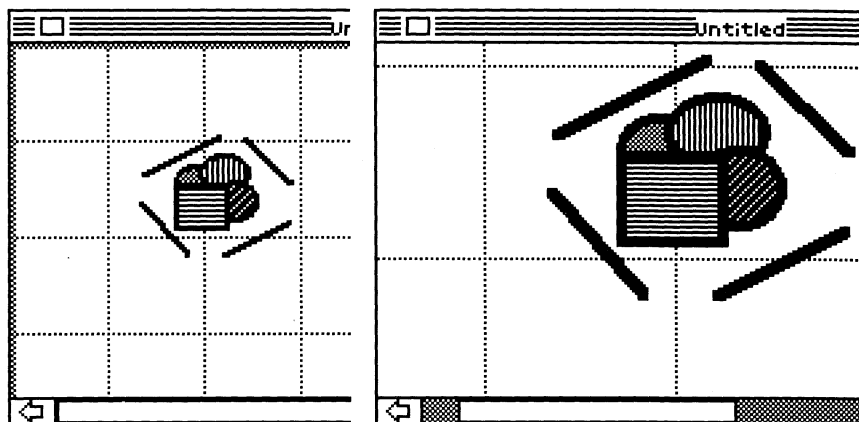
#### ■ Normal Scale

The Normal Scale command is used to return the view of your document to TopDraw's default setting, 1.0.

#### ■ Enlarge

The Enlarge command is used to make the view of your document larger, allowing you to see more detail of the document.

When you choose the Enlarge command, the view of the document "zooms in" one step. If you use the Enlarge command again the view will zoom in another step, unless you've reached the point of maximum enlargement, which is the most detail that TopDraw can produce (see "Maximum Enlargement" in this chapter).



If you need more precise control over the view of your document, use the Set View command.

■ **Maximum Enlargement**

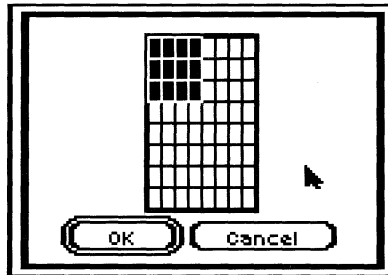
The Maximum Enlargement command is used to change the view of the document to its maximum size. Expressed as numbers in the information bar, this view scale is 0.25.

To zoom in as far as TopDraw will allow, choose the Maximum Enlargement command and the view of the document will zoom in to show the most detail that TopDraw can produce.

■ **Document Size...**

The Document Size command allows you to adjust the number of pages your document occupies.

When you choose the Document Size command, a dialog box appears that contains an eight page by eight page grid representing the total number of pages (64) available in the document. Each cell in this grid represents one page of your document. The size of your page is determined by the page setup you've chosen (see "Page Setup" in this chapter). The pages currently being used by your document are highlighted on the grid.



By placing the pointer on the currently highlighted pages in the grid and moving the pointer (with the mouse button held down), you can adjust the number of pages that your document will use. Any highlighted pages in the grid will be included in the document. When you've adjusted the document size, click the OK button and you'll return to TopDraw. If you decide not to adjust the document size, click the Cancel button and you'll return to TopDraw without making any changes.

Changing the number of pages in a document may affect the view scale for the reduce commands. As the document size increases, greater reduction is necessary to include the entire document in the viewing window.

## **Arrange Menu**

The Arrange Menu contains commands that allow you to manipulate objects in special ways. Using these commands you can move, rearrange, rotate, flip, group or ungroup, lock and unlock, and align objects in your document.

### **■ Bring to Front**

The Bring to Front command lets you move selected objects or groups of objects in front of all other objects in a TopDraw document.

Select an object or group of objects and choose the Bring to Front command. The object(s) you've selected will move to the front of all other objects in the document.

If you bring a grouped selection to the front, the objects in the group will maintain their stacked relationship to each other.

### **■ Send to Back**

The Send to Back command lets you move selected objects or groups of objects behind all other objects in your document.

Select an object or group of objects and choose Send to Back. The object will move behind all other objects in a TopDraw document.

If you send a grouped selection to the back, the objects in the group will maintain their stacked relationship to each other.

### **■ Shuffle Up**

The Shuffle Up command lets you move an object up one object level in the document.

Select the object and choose Shuffle Up and the object will move up one object level in your TopDraw document. You may need to use Shuffle Up several times to achieve the arrangement you want.

### **■ Shuffle Down**

The Shuffle Down command lets you move an object or group of objects down one object level in a document.

Select the object and choose Shuffle Down, and the object will move down one object level in your document. You may need to use Shuffle Down several times to achieve the arrangement you want.

## ■ Rotate Left

The Rotate Left command lets you rotate an object 90 degrees about its center, to the left.

Select the object or object group you want to rotate and then choose Rotate Left. You can use Rotate Left as many times as is necessary to achieve the rotation that you want.

## ■ Rotate Right

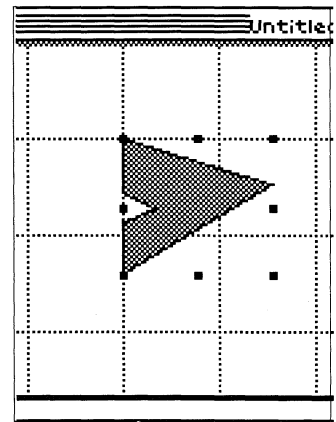
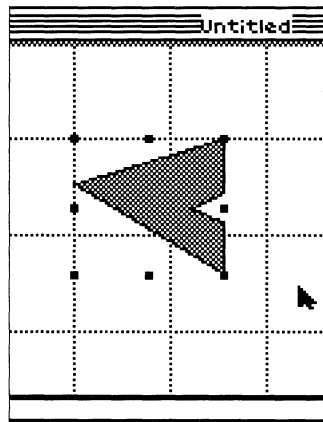
The Rotate Right command lets you rotate an object 90 degrees about its center, to the right.

Select the object or object group you want to rotate and choose Rotate Right. You can use Rotate Right as many times as is necessary to achieve the rotation that you want.

## ■ Flip Horizontal

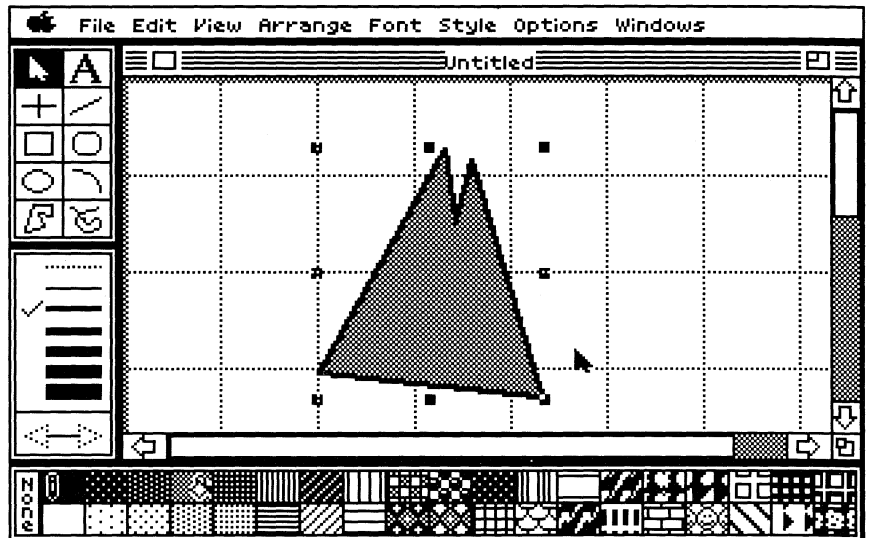
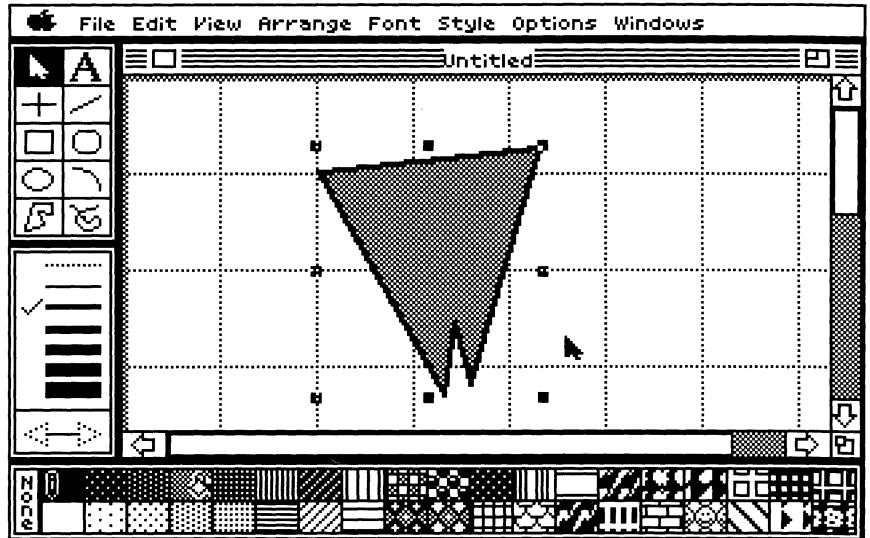
The Flip Horizontal command lets you flip an object around its horizontal center.

Select the object or object group and choose Flip Horizontal. Objects appear flipped from side to side as a mirror image.



## ■ Flip Vertical

The Flip Vertical command lets you flip an object around its vertical center.

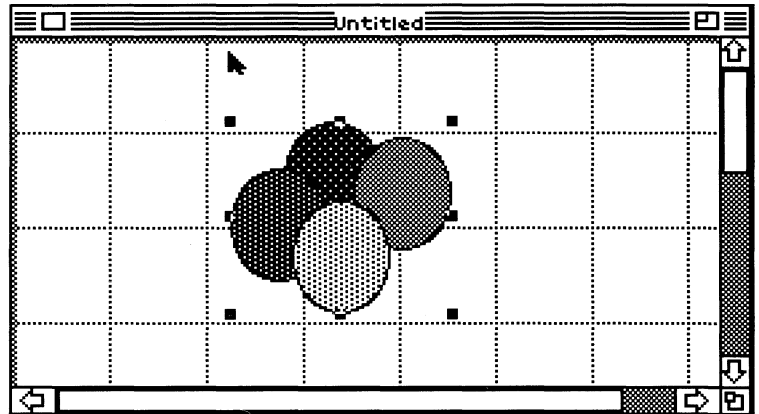
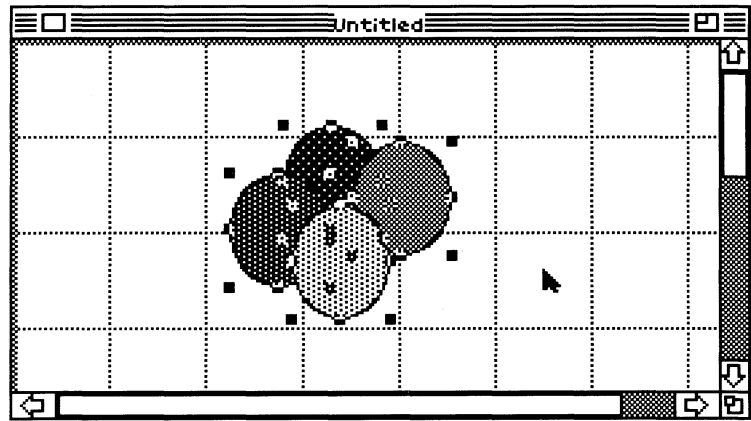


Select the object or object group you want to flip and choose the Flip Vertical command. Vertically flipped objects appear upside down and backward.

## ■ Group

The Group command lets you attach objects together to make a single object. Creating an object group allows you to manipulate objects more efficiently.

Select the objects you'd like to connect and choose the Group command. The objects will become a single object, with only one set of object handles. Anything you do to a single object you can do to a grouped object, with the exception of edits, which can only be performed on particular types of objects (see "Edit Arc Angles" and "Edit Polygon Points" under "Edit Menu" in this chapter).



Objects maintain their stacked relationships when they are grouped. The objects in a group can be manipulated using the commands in the Arrange Menu. Grouped objects are treated as a single object and may be grouped with any other object or object group.



## ■ Ungroup

The Ungroup command lets you break a selected group into its component objects.

To ungroup an object group, select that group and then choose the Ungroup command. The objects will separate and you'll be able to manipulate them as individual objects.

If you ungroup an object composed of groups, the component groups maintain their grouped status.

## ■ Lock

The Lock command lets you "glue" an object to the document so that it cannot be moved.

Select the object you want to affix to the drawing surface and choose the Lock command. The object will stay in that position on the document until you Unlock and move it.

Locked objects can only be selected, copied to the Clipboard, and unlocked.

## ■ Unlock

The Unlock command lets you unlock an object locked to the document with the Lock command.

To "unglue" an object from the drawing surface, select the object and choose Unlock. The object will be unlocked and you'll be able to manipulate it like any other object.

## ■ Align to Grid

The Align to Grid command lets you automatically move an object so that its boundaries are aligned with the lines of the current grid (ruler settings) setup.

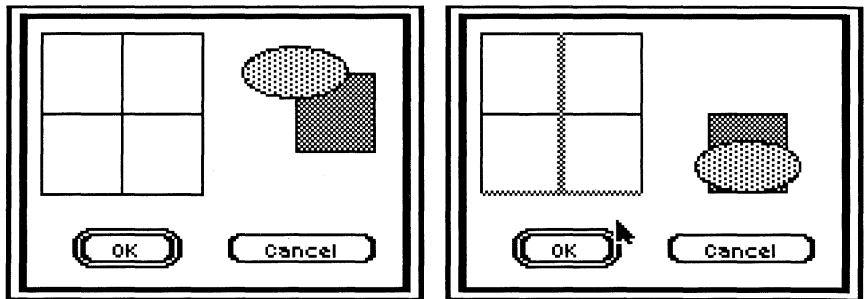
**Note:** The Align to Grid command may resize an object so that its boundaries line up with the grid.

If you've changed the alignment grid or drawn objects without the grid and would like to align them to the current grid setting, select the objects that you want to align and choose **Align to Grid**. The objects will be moved (and resized if necessary) so that they line up with the current grid lines.

## ■ Align Objects...

The **Align Objects** command allows you to accurately align selected objects.

To align two or more objects to each other, select the objects and choose the **Align Objects** command. A dialog box containing an alignment box and two sample objects will appear. The alignment box consists of two sets of lines. The outer lines of the box represent top, bottom, right and left alignment. The two lines inside the box represent horizontal center and vertical center. Click on any combination of the lines in the alignment box to activate them. When selected, they appear red. The sample objects illustrate the selected alignment to give you an idea of the effect. You can choose more than one type of alignment at a time, although some types of alignment remove the effects of other types.



When you've selected the type of alignment that you like, click on the **OK** button, or press *return* and the objects will be aligned. If you decide not to align the objects, click the **Cancel** button or press *esc*.

## Font Menu

The Font Menu lets you choose fonts for selected text objects or for text objects to be typed in at the insertion point. The preset font is Geneva.

When you choose a font, a check mark (√) appears beside that font on the Font Menu. If you select a text object, the font of the selected text object is the chosen font and appears checked on the Font Menu.

When you cut or copy text objects, the text object retains its font along with its size and style.

## Style Menu

The Style Menu contains options for changing the style of text, allowing you to choose a style for selected text objects or for creating text objects. The preset style is Plain.

When you choose a style, a check mark (√) appears beside the style on the Style Menu. You can choose a combination of styles. As each new style is chosen, it appears checked on the Style Menu. The only style which can't be used in combination with other styles is Plain, which removes all other styles.

You can deselect a style by choosing the checked style again.

The Style Menu also contains options for changing the point size of text in text objects. The preset font size is 12 point.

When you choose a font size, selected text objects or text used to create text objects is automatically changed to the specified point size and the chosen size appears checked on the Style Menu.

When you cut or copy text, it retains its size as well as its font and style.

## Options Menu

The Options Menu contains various commands that let you change settings and edit features of TopDraw.

### ■ Edit Colors...

The Edit Colors command lets you change the colors that are used to create the pattern palette.

When you choose Edit Colors, the TopDraw Color Editor appears.

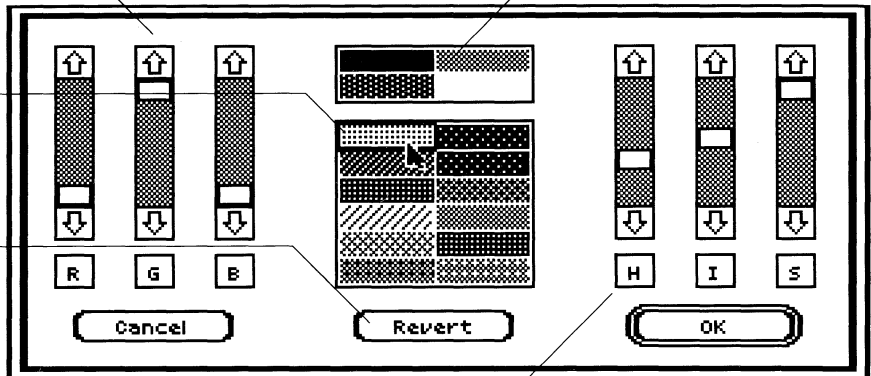
The R, G, and B scroll bars let you edit the current color selection by blending varying amounts of red (R), green (G), and blue (B).

The 12-color palette displays the non-system colors as they will appear in your documents.

Revert button lets you revert to last saved versions of the color palettes.

The H, I, and S scroll bars let you edit the current color selection by changing the hue (H) and varying the intensity (I) and saturation (S) of the selected hue.

The system color palette displays the colors used by TopDraw for menus, windows, and palettes.



The Color Editor provides you with two different methods for editing colors. The first, known as the RGB method, allows you to mix varying amounts of red, green, and blue to change the composition of a color. To do this, you'll use the R (red), G (green), and B (blue) scroll bars on the left side of the Color Editor. These scroll bars are arranged vertically, with the top of each scroll bar representing placement of 100% of the scroll bar's color in the selected color and the bottom of each scroll bar representing 0% of the scroll bar's color in the selected color. To change a selected color to red, for example, you'll want to drag the scroll box to the top of the R scroll bar and the scroll boxes in G and B to the bottoms of their respective scroll bars. When R, G, and B are all set at maximum, the selected color changes to white; when R, G, and B are all set at off, the selected color changes to black.

The second method for editing colors, known as the HIS method (for hue, intensity, and saturation), lets you edit a color by varying different characteristics of the color. The first of these, hue, is the color itself. When you scroll the H scroll bar, the color displayed in the selection box cycles through the current available colors.

Intensity is a measure of the brightness in a color. When you move the scroll box toward the top of the I scroll bar, the selected color in the edit palette becomes lighter (until it becomes pure white); when you move the scroll box toward the bottom of the I scroll bar, the selected color becomes darker (until it becomes pure black).

The third color characteristic, saturation, is a measure of the richness of a color, how strong or pastel a color appears. As you move the scroll box toward the top of the S scroll bar, the selected color becomes stronger, until it is the strongest expression of that hue. As you move the scroll box toward the bottom of the S scroll bar, the selected color becomes lighter, until it becomes pure gray.

To edit a color using the HIS method, first choose a color or hue by scrolling the H scroll bar until the desired hue appears in the selection box, then scroll the I and S scroll bars to modify the intensity and saturation of the selected color. As you scroll the H, I, and S scroll bars, the R, G, and B scroll bars will also be adjusted accordingly (and vice versa).

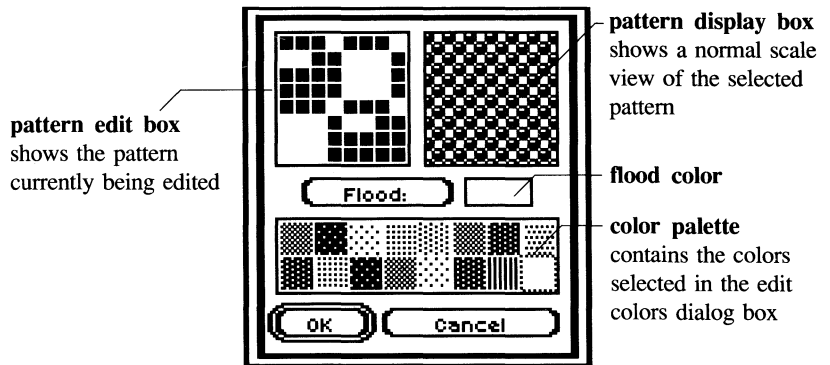
Editing the system colors — black, white, red, and grey, placed in a separate box above the other colors — will result in changing TopDraw's screen colors. This set of colors is used to show the screen, so editing them will change not only your document, but the look of the program as well.

## ■ Edit Patterns...

The Edit Patterns command lets you change the line and fill patterns that appear in the pattern palette.

To edit a pattern, first select the pattern that you'd like to edit, and then choose the Edit Patterns command (you can also bring up the Pattern Editor by double-clicking on the pattern that you want to edit). A dialog box will appear in which you'll see a colors palette, a large eight pixel by eight pixel grid containing the pattern that you just selected, and a sample box showing how an area filled with the pattern might look. You'll also see a box containing the currently selected color with a Flood button beside it.

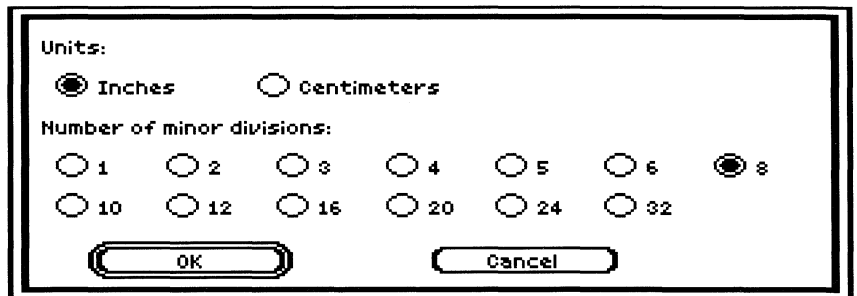
Continue editing the pattern by selecting colors from the palette and clicking the pixels in the grid with the selected colors. When you're satisfied with your pattern adjustment in the sample fill area, click the OK button and the new pattern will be placed into the pattern palette in place of the one that you edited.



To fill the entire pattern with a single color, select a color from the palette and then click on the Flood button. Every pixel in the pattern will be of the selected color. To copy a pattern from the pattern palette into the pattern definition box, click on the pattern in the pattern palette. If you decide not to change the pattern, click on the Cancel button; you'll return to TopDraw without changing any of the patterns.

## ■ Edit Rulers...

The Edit Rulers command lets you change the measuring system used by TopDraw's rulers and the number of minor divisions per major division in the rulers.

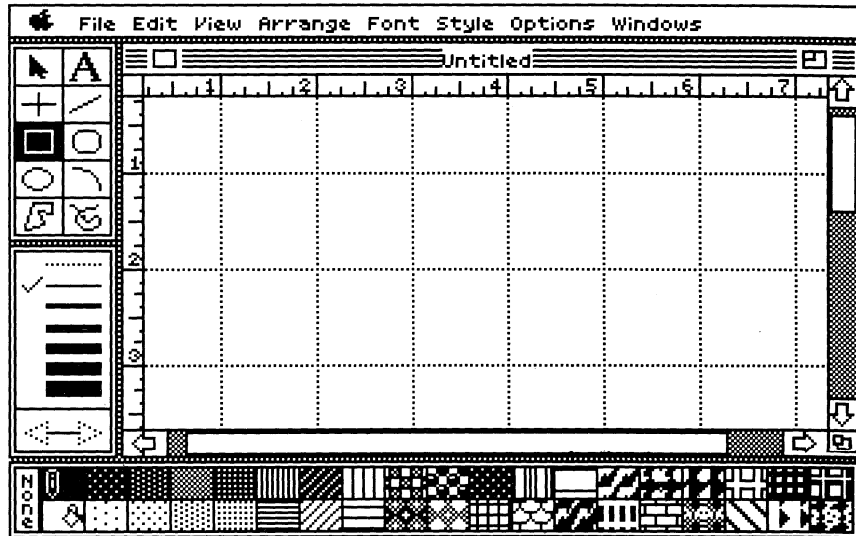


When you choose the Edit Rulers command, a dialog box appears that allows you to pick either inches or centimeters as the major divisions on the rulers. You also have the option of choosing the number of markings that will appear per that major division. To change the rulers, click on the options that you want to use to create your custom rulers. When you're finished, click OK to confirm your choices. The changes you make will not be evident unless the rulers or ruler lines are visible. If the grid is on, it will conform to the minor divisions of the rulers you've set.

## ■ Show/Hide Rulers

The Show/Hide Rulers command operates like a toggle switch. Show Rulers displays rulers in the document window. Hide Rulers removes the rulers from the document window. Only one of these commands is active in the menu at any time.

In a new document, the rulers aren't visible, unless you've used the Save Defaults command to change the predefined default settings. Show Rulers can only be used when the rulers aren't visible on the screen. Hide Rulers can only be used when the rulers are visible on the screen.



If you'd like to use the rulers to guide you in making, aligning, and positioning objects, choose Show Rulers. Rulers will appear on the upper and left edges of the document window, allowing you to make accurate measurements in placing objects.

The rulers don't show up on any printed copies of your work. They do, however, affect the view scale of your document window by decreasing size of the document window.

## ■ Show/Hide Ruler Lines

The Show/Hide Ruler Lines command operates like a toggle switch. The Show Ruler Lines command displays ruler lines in a document. Hide Ruler Lines removes ruler lines from a document. Only one of these commands is active in the menu at a time.

In a new document, the ruler lines are visible, unless you've used the Save Defaults command to change the predefined default settings.

Ruler lines can help you align objects and obtain accurate measurements on the TopDraw screen. Choose Show Ruler Lines and the ruler lines will appear. The ruler lines will appear behind any objects that you've drawn, and will remain displayed in the document window until you remove them.

The ruler lines don't show up on any printed copies of your work.

## ■ Show/Hide Page Breaks

The Show/Hide Page Breaks command operates like a toggle switch. The Show Page Breaks command displays page breaks in a document. Hide Page Breaks hides page breaks in a document. Only one of these commands is active in the menu at one time.

In a new document, the page breaks are visible, unless you've used the Save Defaults command to change the predefined default settings.

To know where the pages of paper will line up with the drawing that you're working on, choose Show Page Breaks. The page break lines (heavy dotted lines) will appear as a part of the drawing area. The page break lines accurately show where the edges of the drawing surfaces of individual pieces of paper are, allowing you to know how to align certain objects on your drawings. The page break lines appear drawn over objects on-screen but won't appear on printed copies of your document.



## ■ Show/Hide Dimensions

The Show/Hide Dimensions command operates like a toggle switch. If you choose the Show Dimensions command, dimensions of objects you're editing and moving will be displayed on the screen. If you choose the Hide Dimensions command, you won't see this information. One of these commands is active in the menu at a time.

In a new document, the dimensions aren't visible, unless you've used the Save Defaults command to change the predefined default settings.

Show Dimensions allows you to measure sizes and distances as you're drawing an object.

To measure distances as you're drawing an object (which is useful for such things as diagonal lines), choose Show Dimensions and a set of numbers will appear near your drawing tool to show you certain measurements:

- When dragging a selection box, the numbers show the height and width of the selection box.
- When drawing, resizing, or selecting most objects (not including line objects), the numbers show the height and width of the object.
- When drawing, selecting, or resizing a line object, the numbers show the line's length.
- When selecting or resizing a group of objects, the numbers show the height and width of the group.
- When drawing a polygon, the numbers show the length of each line of the polygon as it's being drawn.
- When editing the angle of an arc, the numbers show the number of degrees in the end of the arc line you're moving.

■ **Show/Hide  
Document Info**

The Show/Hide Document Info command operates like a toggle switch. The Show Document Info command displays document information. Hide Document Info removes document information from view. Only one of these commands is active in the menu at a time.

The information displayed in the information bar is the number of objects in the current document, the amount of available memory, and the current view scale of the document. In a new document, the document information is not visible, unless you've used the Save Defaults command to alter the "normal" settings of the program.

■ **Turn Grid On/  
Turn Grid Off**

The Turn Grid On/Turn Grid Off command operates like a toggle switch. The Turn Grid On turns on the invisible grid in a document. This command helps you align objects in your document. Turn Grid Off turns the grid off. Only one of these commands is active in the menu at a time.

In a new document, the grid is turned off, unless you've used the Save Defaults command to change the predefined default settings.

The Turn Grid On command allows you to turn on the invisible grid that helps you align objects in your drawing.

For more accurate object alignment, but less precise control over your drawing tools, use Turn Grid On and the invisible grid will become active. Your objects will "snap" to the next grid alignment as you're drawing them, ensuring that they will line up more precisely.

The spacing of the grid is determined by the smallest divisions of the ruler, whether the rulers and rulers lines are on or off. To edit the spacing of the grid, use the Edit Rulers command to create the spacing you want.

Objects aligned to a particular grid spacing will not change spacing when the grid is edited, so be sure to use the Align To Grid command to put the objects into new grid alignment. Changing the rulers from inch to centimeter readings automatically changes the smallest spacing of the grid; you may have to realign your objects, however, if you make this change.

## ■ Enable/Disable Auto-Select

The Enable Auto-Select command lets you automatically select objects as you draw them.

Auto-select enable is indicated by a black box surrounding the arrow pointer tool on the tool palette. To select each object as it's drawn, choose the Enable Auto-Select command from the Options Menu. Every object that you draw will be selected after drawing it. This step-saving command gives you the ability to manipulate objects as soon as they're drawn. If you hold down the *option* key while Auto-Select is enabled and then draw several objects, all of the objects will be selected when you release the *option* key.

If Auto-Select is disabled, you can toggle it on by holding down the *option* key while drawing an object. When you release the mouse button, the object will be selected, but auto-select will remain disabled.

In a new document, Auto-Select is disabled, unless you've used the Save Defaults command to change the predefined default settings.

## ■ Restore Defaults

The Restore Defaults command allows you to return all of the program startup settings to their default values.

To restore the original settings, choose Restore Defaults and each of the settings, including all line/fill patterns and colors, will be as they were when you started the program, unless you've used the Save Defaults command to change the predefined default settings.

## ■ Save Defaults

The Save Defaults command allows you to save many of the current menu settings, line/fill patterns, colors, and other parameters to the program disk, where they will become the defaults used whenever the program's run. Page setup, view scale, and document size are *not* saved as defaults using the Save Defaults command.

The following options are saved by the Save Defaults command:

- All current colors
- All current patterns
- The current line pattern
- The current fill pattern
- The current print options
- Show/Hide rulers status
- All current ruler settings
- All current page setup settings
- Show/Hide ruler lines status
- Show/Hide page breaks status
- Show/Hide dimensions status
- Show/Hide document info status
- Turn Grid On/Off status
- Enable/Disable Auto-Select status

If you'd like to create your own default settings so that they will always be active when you run the program, follow these steps:

- ① **Run TopDraw.**
- ② **Set your own preferences, including any colors, print options, line/fill patterns, and settings for the functions from the Options and Windows Menus.**
- ③ **Choose the Save Defaults command.**

The new default settings for the program are those that you've just saved to disk. You can use these instructions to change the default settings at any time.

**Note:** Because the Save Defaults command makes a permanent change to your TopDraw disk, use this command only if you're sure you want to change the existing defaults. If you need to restore the original TopDraw defaults to your program disk, they are listed on page 174 of this manual.

## Windows Menu

### ■ Show/Hide Tools

The Windows Menu contains commands to help make the TopDraw desktop your own custom workspace.

The Show/Hide Tools command lets you toggle between displaying the tool palette and concealing it from view.

### ■ Show/Hide Lines

The Show/Hide Lines command lets you display the line palette as part of the TopDraw desktop or conceal it from view.

### ■ Show/Hide Patterns

The Show/Hide Patterns command allows you to toggle on or off the visibility of the pattern palette on the desktop.

### ■ Clean Up Windows

The Clean Up Windows command returns the tool, line, and pattern palettes to their original positions on the TopDraw desktop. When you move the tool, line, and pattern palettes, using the Clean Up Windows command will restore the document window and any visible palettes to their original positions on the screen specified by the default settings.

## Installing TopDraw on a Hard Disk Drive

Although TopDraw is copy-protected, it can be copied to and run from a hard disk drive without affecting your hard drive or any files on it.

To use TopDraw with a hard drive, your hard drive must be ProDOS-compatible and have ProDOS installed. Consult your hard drive user's manual to determine whether your drive can be configured to run under ProDOS.

Use a disk utilities program, such as the System Utilities on the *Apple IIGS System Disk*, to create a separate directory for TopDraw. For example, if your hard drive had the name HD1 as its root directory name, a good name for your TopDraw disk might be "/HD1/TopDraw." Once you've created this directory, use the copy file command on your utilities disk to copy the following files to your hard drive:

- TopDraw
- TD.Defaults

Run TopDraw from your hard drive using the Program Launcher or the DeskTop System Software, included with your *Apple IIGS System Disk*.

# TopDraw Original Defaults

**Title**  
"Untitled"

## **Text**

Font: Geneva (or first font in System Folder)  
Font Size: 12 Point (or size of first font in System Folder)  
Font Style: Plain

## **Printer Setup**

Printer: ImageWriter  
Printer Port: Printer

## **Page Setup**

### *ImageWriter*

Paper Size: US Letter  
Special Effects: None  
Orientation: Vertical (Portrait)

### *LaserWriter*

Paper Size: US Letter  
Orientation: Vertical (Portrait)  
Vertical Sizing: Normal  
Printer Effects: None  
Reduce or Enlarge: 100%

## **Print Specifications**

### *ImageWriter*

Quality: Faster  
Pages: All  
Copies: One  
Paper Feed: Automatic  
Color: Unselected

### *LaserWriter*

Pages: All  
Copies: One  
Paper Source: Cassette

## **Default Document Settings**

Page Breaks: Displayed  
Ruler Lines: Displayed  
Grid: Off  
Enable Auto Select: Off  
Dimensions: Off  
Information Bar: Off

Line Palette: Displayed  
Line Size: 1x1 pixels (at normal scale)  
Arrowheads: No arrowheads selected

### *Rulers:*



Major Divisions: Inches  
Minor Divisions: Eighths  
Document Size: One page  
Scale: 1.0  
Corner Radius: 20 pixels per side

Pattern Palette: Displayed  
Line Pattern: Black  
Fill Pattern: White

Tool Palette: Displayed  
Tool Selected: Arrow Pointer Tool

## Glossary

### **key**

Also known as the Apple or Command key and represented by both the open apple () and the cloverleaf or propeller symbol (), this key is used in combination with other keys for executing commands.

### **Menu**

The first menu on the left in the menu bar, this menu displays the names of any desk accessories you have installed on your system disk.

### **arc**

A segment of a curved line. In TopDraw, arcs are treated as portions of ovals: when filled with a color pattern, they appear as segments of filled ovals; when filled with None, they appear as curved lines.



### **arc tool**

A tool in TopDraw's tool palette used to draw arcs.



### **arrow pointer**

One of the four types of pointers used by TopDraw. With the arrow pointer you choose commands from the menu bar, specify option settings, click on buttons in dialog boxes, and scroll with the scroll bar. When you move the mouse outside the document window, the pointer automatically changes to the arrow pointer, regardless of which tool you're currently using in the document window.



### **arrow pointer tool**

The tool that's active when you start up TopDraw. While it's identical in appearance to the arrow pointer, the arrow pointer tool is used to select, resize, and drag objects in the document window, whereas the arrow pointer is used to perform document functions such as choosing commands and scrolling.

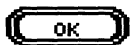


### **arrowhead**

Shapes in the Arrowhead Selection Box you can place on the endpoints of lines, arcs, open polygons and open freehand shapes to indicate direction.

### **bit-mapped graphics**

Images drawn by software which places ("maps") pixels on the screen according to an internal "mapping" of bits in video memory locations. Bit-mapped graphics are the type of graphics created by "paint" programs, as compared to the object-oriented graphics of "draw" programs. See also **object-oriented drawing**, **pixel**.



### **button**

A small box, resembling a pushbutton, with rounded corners and a label which appears in a dialog box. Clicking a button with the mouse confirms or cancels an operation.



### **Cancel button**

A button which appears in most dialog boxes. Clicking this button cancels the command before it's executed.

### **choose**

To pick a command from a TopDraw menu by dragging the mouse down the menu until the desired command is highlighted and then releasing the mouse button. You often choose a command from a menu after you've selected something for the command to work on.

### **click**

To position the pointer on something and then quickly press and release the mouse button. You click in order to choose commands and options, select the insertion point, or to confirm or cancel an operation.

### **Clipboard**


A place in memory reserved by TopDraw for holding objects which you cut or copy. You can then paste the contents of the Clipboard into a different location in the document or into a different document. See also **copy, cut, paste**.



### **close box**

The small box on the far left corner on the title bar of the document window. Clicking this box closes the document.

### **command**

An instruction to the computer to perform some task or function; a word or phrase on a menu that specifies a task for TopDraw to perform. You choose a command by dragging down a menu until the command is highlighted and then releasing the mouse button. Some commands can also be executed by simultaneously pressing the  key and a character key.

### **corner radius**

The degree of curvature of the corner of a rounded rectangle. TopDraw lets you modify the corner radius of rounded rectangles (and "regular" rectangles) with the Corner Radius command on the Edit Menu.

### **Crossbar pointer**

One of the four types of pointers used by TopDraw, the crossbar pointer is used when you draw objects other than text. When you choose any of the drawing tools except the text tool and move the cursor into the document window, the cursor will change to a crossbar pointer.

### **delete key**

A key on the Apple IIGS keyboard which removes a selection or the character to the left of the insertion point in a text object.





**desktop**

The TopDraw desktop is the working area on your screen when you use TopDraw; it consists of the menu bar and the empty grey area beneath it. When you open a document, it's as if you're putting a drawing on top of your desktop. The desktop is not to be confused with the DeskTop System software for the Apple IIGS, which lets you perform file handling functions on a similar desktop. See **DeskTop System software**.

**DeskTop System software**

A collection of system utilities packaged with your Apple IIGS which lets you perform file-handling functions in the same sort of desktop environment supported by Apple IIGS application programs. For more information, see the *Apple IIGS System Disk User's Guide*.

**dialog box**

A box which appears on the desktop whenever you're performing an operation which requires additional information, a choice of several options, or your approval before proceeding. Some dialog boxes display warnings telling you that you're trying to perform a task which can't be done or which will do something — like destroy important information — that can't be undone.

**dimmed**

When a command, menu title, or dialog box option is dimmed it appears to be faded or grey, indicating that it cannot be chosen, chosen from, or selected.

**document**

Anything you create at one time with TopDraw or any other Apple IIGS application program. A TopDraw document consists of objects and page setup information saved as a file on disk with a ProDOS filename.

**document scale**

The relative size of the objects in your document as they appear in the document window. The scale may be changed by using the View Menu commands. Also known as **view scale**.

**document size**

The number of pages of paper on which a document appears when printed at normal scale. The document size can be changed by using the Document Size command on the View Menu.

**document window**

The document window provides a window into the TopDraw drawing area. As with other windows in IIGS application software, the document window can be resized, zoomed, scrolled, and closed.



**double-click**

To position the pointer on something and rapidly press and release the mouse button twice. Double-clicking a disk, folder, or document name or icon in a Save or Open command dialog box opens the directory or document associated with that name or icon.

**drag**

To simultaneously press and move the mouse in order to continuously select or move something (like an object or group of objects) or to choose a command from a menu. The move or selection is completed when you release the mouse button.

**enter key**

A key on the numeric keypad of the Apple IIGS keyboard which, when pressed, inserts a carriage return character and can therefore be used in place of the *return* key in entering carriage returns or confirming commands.

**esc key**

A key on the Apple IIGS keyboard which can be used to cancel some commands (in dialog boxes) in TopDraw.

**file**

Any information — a graphics document, word processing document, spreadsheet data, a directory, an application program — stored in one place under one name on a volume (disk, hard drive, RAM drive).

**fill pattern**

One of the 38 patterns (39, counting None) that can fill the interior of an object. A fill pattern is selected on the pattern palette by dragging the paint bucket icon to the pattern or by clicking on the right side of the pattern.

**folder**

A subdirectory on a volume; represented by a folder icon. Folders provide a visual analogy for what subdirectories do — help you organize your documents on a volume the way real folders help you organize paper documents in a file cabinet.

**font**

A character set of a specific type style, including letters, numbers, punctuation marks, and other special characters. TopDraw provides you with a variety of fonts, located on the Font Menu, to use in creating text objects.

**font size**

See **point size**.



### **freehand shape tool**

The tool in TopDraw's tool palette that lets you draw freehand lines and shapes. When the freehand shape tool is selected you can't use rulers or the grid to guide your drawing.

### **grid**

An invisible pattern of horizontal and vertical lines which conform to the minor ruler divisions set in TopDraw. The grid is used to align objects and shapes drawn in the document window. You can turn the grid on and off with the Grid On and Grid Off commands on the Options Menu.

### **group**

To attach a number of objects to each other (with the Group command on the Arrange Menu) so that they may be treated as a single object.

### **highlight**

To make something appear distinct from the rest of the document by inverting it on the screen. Your choice is highlighted to indicate that it's selected. See also **select**.



### **horizontal/vertical line tool**

The tool in the TopDraw tool palette that lets you draw horizontal and vertical lines that are always parallel to the edges of the document window.

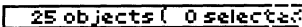


### **I-beam**

One of the four forms of the TopDraw pointer, the I-beam is shaped somewhat like the insertion point and is used to select the insertion point in text objects and to select text for editing, deleting, and replacing.

### **icon**

An image that graphically represents an object, a concept, or a message.



### **information bar**

A box at the top of the document window that indicates the current number of objects in the current document, the amount of free memory in your computer, and the current view scale of the current document.




### **input bars**

Input bars are boxes in dialog boxes where you type in information requested by the dialog box. When you click on an input bar an insertion point appears, allowing you to type.

### **insertion point**

The blinking vertical bar which marks the place in a document (or an **input bar**) where you type in text to create or modify a text object.

### **keyboard equivalents**

Some TopDraw commands can be executed without going to the menu by simultaneously pressing the  key and a character key. These key sequences are called the keyboard equivalents to their respective commands on the menus. Commands with keyboard equivalents have their keyboard equivalents displayed to the right of the command on its menu.



### **landscape orientation**

One of the ways you can print on the page with TopDraw. Landscape print orientation tells TopDraw that you want to print sideways on the page, with the top line across the right margin of the paper. Also called horizontal print orientation. See also **portrait orientation**.



### **line palette**

The rectangular area on the lower-left side of the TopDraw desktop which displays the current line size and example lines which can be selected to change the line size of objects.

### **line pattern**

The selected pattern from the pattern palette used to create lines and the borders of objects. The pen icon is moved in the pattern palette to choose the pattern or color.



### **line tool**

The tool in the TopDraw tool palette used to draw straight lines at any angle.

### **major ruler divisions**

Units for major divisions on the ruler scales, displayed in either centimeters (metric) or inches (English).

### **menu**

A box containing a list of commands which appears when you press on its title in the menu bar with the mouse (this is called "pulling down" the menu). You choose commands by dragging down the menu until the command you want to use is highlighted and then releasing the mouse button.

### **menu bar**

The horizontal box at the top of the screen from which you pull down menus and choose commands.



### **minor ruler divisions**

The number of divisions between the major divisions (inches or centimeters) on the rulers. Minor ruler divisions can number up to 32 per major division. You can specify the number of minor ruler divisions with Edit Rulers.

### **None**

A box on the far left side of the pattern palette which, when selected, results in an object with no fill pattern (a "transparent" or "hollow" object).

### **object level**

TopDraw lets you place objects on top of one another, or *overlay*, objects. Each layer in a group of overlaid objects is called an object level. You can change the object level of a selected object with the Bring to Front, Send to Back, Shuffle Up, and Shuffle Down commands. See also *overlay*.

### **object-oriented drawing**

A method of creating graphics using mathematically defined shapes that can be easily manipulated and combined to create pictures.

### **open object**

Any object that when completed has two endpoints.

### **operation**

Any drawing job performed by TopDraw; also called a task.

### **option key**

The key on the left side of the bottom row of the Apple keyboard which can be used in combination with other keys to perform certain tasks, such as selecting.

### **oval tool**

The tool on the TopDraw tool palette used to draw ovals and circles.

### **overlay**

To place one object on top of another. See also **object level**.

### **paint bucket icon**

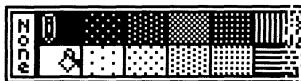
The icon that lets you choose the fill pattern for objects.

### **pattern palette**

The palette that contains the line and fill patterns for objects created in TopDraw.

### **pen icon**

The icon used to choose the line pattern for any object created in TopDraw.

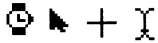


### **pixel**

Short for *picture element*. A point on the IIGS graphics screen. In *bit-mapped graphics*, the visual representation of a bit (in video memory) on the screen.

### **point size**

The overall size of a font, measured in points. A point is equivalent to 1/72 of an inch, so a 12 point font is equal to 1/6 of an inch. Also known as font size, the point size of a font is actually a measurement of the overall height of the font, as the widths of individual characters (an "l" and a "W," for example) vary greatly. See also **font**.



### **pointer**

A small shape on the screen that moves as you move the mouse. To select, move, and edit objects, you'll use the arrow pointer tool. When you're creating text objects, the pointer takes the form of an I-beam and can be used to select the insertion point as well as to select text objects. While drawing objects and shapes in the document window, the pointer is a cross beam. When you move the pointer out of the the document window, it becomes an arrow and can be used to choose commands from menus, select options, and drag windows. When TopDraw performs an action which takes a few moments to complete, the pointer changes to a wristwatch telling you to stand by for a few moments. See also **arrow pointer**, **arrow pointer tool**, **crossbar pointer**, **I-beam pointer**, **wristwatch pointer**.

### **polygon**

A geometric figure composed of three or more lines connected end to end. (In TopDraw, however, you can have **open polygons** consisting of only two lines.) See also **open object**.



### **polygon tool**

A tool on the TopDraw tool palette used to draw polygons with user-defined vertices. See also **polygon**, **vertex**.



### **portrait orientation**

One of the ways you can print on the page with TopDraw. Portrait print orientation tells TopDraw that you want to print vertically on the page, with the top line across the top margin of the paper. Also called vertical print orientation. See also **landscape orientation**.

### **press**

To place the pointer on something (such as a scroll arrow) and hold down the mouse button to perform a continuous action.

### **ProDOS 16**

Disk operating system for the Apple IIGS under which TopDraw operates.

## **Program Launcher**

A program on the Apple IIGS System Disk that lets you run application programs.



### **rectangle tool**

A tool on the TopDraw tool palette used to draw rectangles and squares.

### **return key**

The large L-shaped key on the Apple keyboard which is used to complete text objects or to confirm choices in dialog boxes (instead of clicking OK with the mouse). The *enter* key can be used in place of the *return* key.



### **rounded rectangle tool**

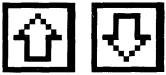
The tool on the TopDraw tool palette you can use to draw rectangles and squares with rounded corners.

### **ruler lines**

The grey dotted lines that appear in the document window to help in aligning objects in a drawing. The ruler lines are displayed at the major ruler divisions. See also **major ruler divisions**.

### **scroll**

To move a document up and down or right and left in the document window so that you can see another part of the document.



### **scroll arrows**

The arrows, located on the top and bottom (or left and right) of a scroll bar, which, when pressed, scroll the document down or up, left or right, in the document window.



### **scroll bar**

The rectangular panel containing a white box (the scroll box) which you drag along the panel to reach any particular part of a document.



### **scroll box**

The box inside the scroll bar which you drag up and down to scroll a document. The scroll box changes size and position to reflect the amount of a document displayed in the document window and the location of that portion in the document.

### **select**

To choose something to receive the next action. When an object is selected a set of handles appear around it.



### **shift key**

There are two *shift* keys on the Apple IIGS keyboard, one on either side of the keyboard. Holding a *shift* key down as you draw with one of the drawing tools restricts the shape that object will assume to a predefined, "regular" shape. Holding *shift* down as you draw with the oval tool creates a circle; holding down *shift* as you draw with the rectangle tool creates a square; etc. Holding the *shift* key down while you type character keys in a text object produces the uppercase letter or the upper character on a two-character key.

### **size box**

A box on the lower-right corner of the document window that you can drag to change the size and shape of the document window.

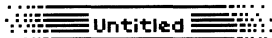


### **text object**

An object used to add captions, titles, and text to a TopDraw document.

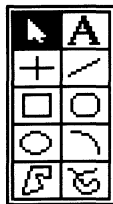
### **text tool**

A tool in the TopDraw tool palette used to place text into a TopDraw document by creating text objects. The text tool also lets you edit text objects.



### **title bar**

The bar at the top of the document window that tells you the name of the document. By dragging the title bar, you can move the document window around on the screen.



### **tool palette**

The palette that contains the tools used to draw objects in TopDraw.

### **vertex**

The point at which the sides of an angle intersect. The plural is **vertices**.

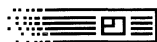
### **view scale**

The relative size of the objects in your document as they appear in the document window; may be changed with the View Menu commands.



### **wristwatch pointer**

One of the four types of pointers used in TopDraw, the wristwatch appears when TopDraw performs an action which takes a few moments to complete.



### **zoom box**

The box on the upper right corner of the document window. Clicking on the zoom box expands the document window to its full size, until it fills the entire screen; clicking it a second time contracts the window to its regular size.



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