8 Exploring Special Shapes, Connectors, and Other Office Automation Helpers

Not everyone is a born artist. But try telling this to your boss, who has elevated you from the company's nominally talented artist to the resident Art Director. You've shown a little design flair, helped out stapling a flyer or two, and, right or wrong, your boss's presumption now is that you're a digital da Vinci.

This chapter is the Corel version of a Non-Artists' Rescue Kit. As you unpack and read through this chapter, you will gain experience with the features most sought by your business—tables, clean and crisp dimensioning callouts for tech work, banners, and perfect polygons—even though you think that *vector* is the kid's name down in the mailroom.

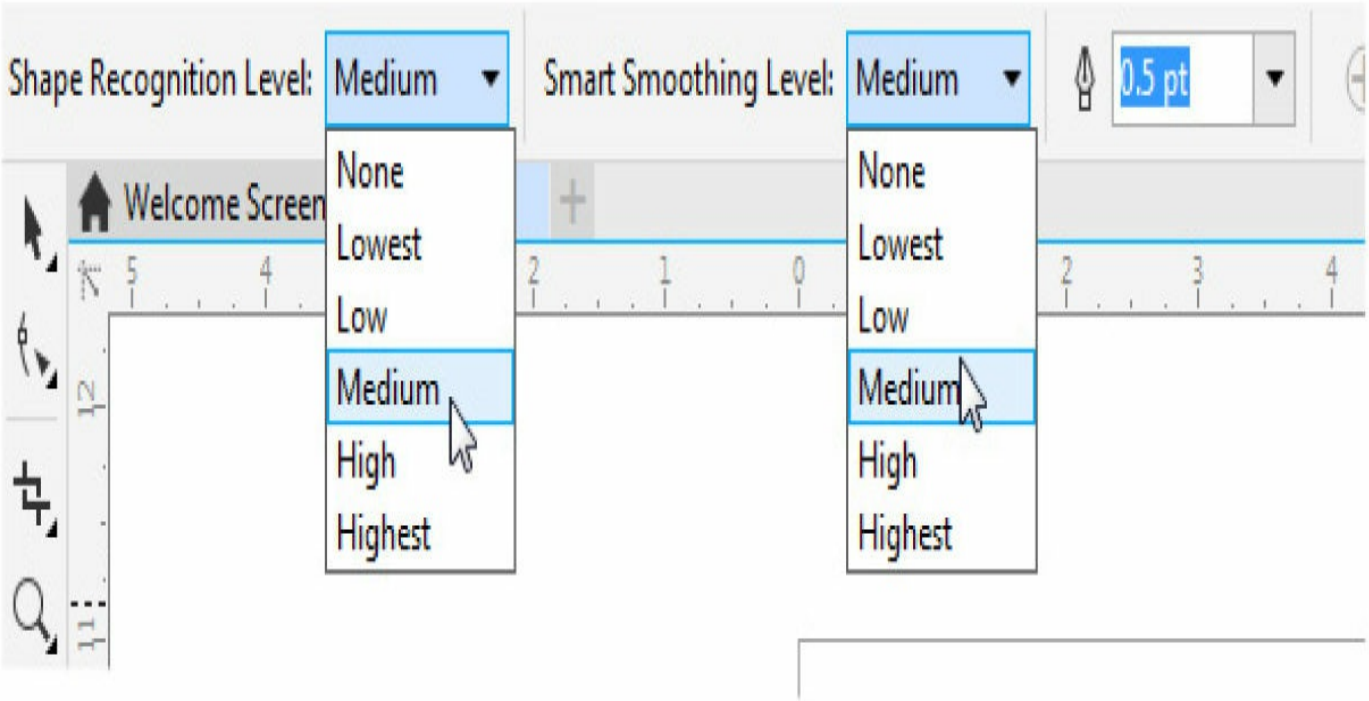
Seriously, CorelDRAW is so all-encompassing as a creative suite that it includes something for just about every need. And this chapter is "all business"—with a healthy serving of fun, as you've come to expect from these *Official Guides*.

CorelDRAW's Smart Drawing Tool

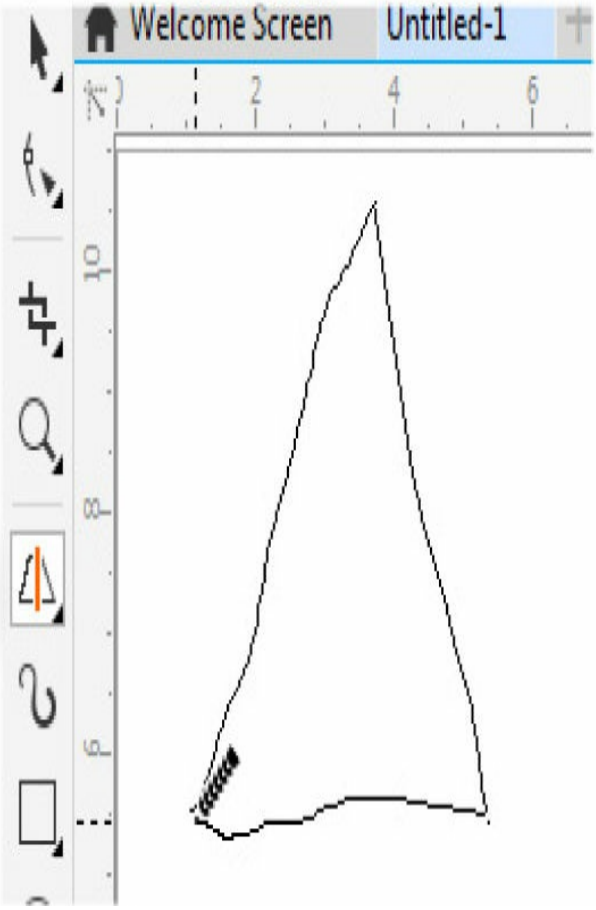
Even if you use a graphics tablet and stylus, you're still drawing freehand, and using a mouse introduces still more flubs when it comes to freehand drawing. Fortunately, the Smart Drawing tool takes the guesswork out of drawing polygonal and rounded objects—in a nutshell, you click-drag *an approximation* of what you intend, tune the options for the Smart Drawing tool based on your first drawing, and in a jiffy you have a precise object with the proportions you need. Pictured next on the Toolbox, the Smart Drawing tool instantly translates rough drawings into shapes you'd usually consider drawing with the Rectangle tool or Ellipse tool—or with other tools that require more effort and skill.

When the Smart Drawing tool is selected, the Property Bar displays Shape Recognition Level and Smart Smoothing Level options (shown next) for setting the sensitivity CorelDRAW uses to translate your roughs into precise shapes.

Recognition and smoothing options



Smart Drawing tool



You control how well your sketch shape is translated into a precise shape by setting these options:

- **Shape Recognition Level** This option determines how precisely your sketched shape is matched to a recognizable shape. You can set it to one of five levels, ranging from Lowest (sketched shapes are not easily recognized) to Highest (sketched shapes are easily recognized), with Medium being the default; None off turns the feature.
- **Smart Smoothing Level** After you've completed a sketch by releasing the mouse button, a level of node smoothing is applied to make object recognition more, or less, precise. This option gives you total control over the smoothing action, much in the same fashion as using the Reduce Nodes spin box on the Property Bar when a path is selected with the Shape tool. Choose from five options ranging from Lowest (less smoothing applied) to Highest (more smoothing applied), with Medium as the default; None turns off the feature.

Tip You can control the delay time interval between the moment you release the mouse button and stop drawing to the moment CorelDRAW determines a recognizable shape. By reducing the delay time, you can sketch several separate lines or shapes one after the other, and DRAW then recognizes them as a single compound path. Double-click the Smart Drawing tool icon on the Toolbox to open Options. The *Drawing Assistance Delay* slider can be set between 0 and 2.0 seconds. The longer you set the delay time, the more time you'll have to keep drawing before CorelDRAW steps in to assist you.

Try the following steps to get an immediate leg up on drawing flawless objects.

CAD: CorelDRAW-Assisted Drawing

Tutorial

1. Choose the Smart Drawing tool and use a click-drag action to sketch the shape of a square or rectangle. Try to keep the sides of the shape vertical and horizontal as you draw; if the square shape looks like a melted ice cube, don't worry. When you release the mouse button, CorelDRAW automatically translates your sketch into a rectangle shape.

2. Choose the Pick tool next and check your Status Bar display. The shape you sketched is specified as a Rectangle, and the Property Bar shows options associated with shapes created with the Rectangle tool, including the rounded-corner options. Try dragging a corner node with the Shape tool to make the rectangle a rounded-corner rectangle.
3. Choose the Smart Drawing tool again, and sketch the shape of an oval or circle. Try to keep the shape parallel to the page orientation, although CorelDRAW can also intelligently refine a sketch of an oval that's rotated. When you release the mouse button, CorelDRAW translates your sketched shape into an ellipse shape.
4. Choose the Pick tool and check your Status Bar. The shape you sketched is specified as an Ellipse, and the Property Bar shows options associated with shapes created with the Ellipse tool, such as the Ellipse, Arc, and Pie properties.

Tip You can alter your sketched shapes on the fly using the Smart Drawing tool to backtrack and erase the path you're drawing. Hold SHIFT as the modifier key to reverse and erase. Release the SHIFT key to resume sketching normally.

The shapes you draw also have special editing properties:

- Rectangles and ovals produced by using the Smart Drawing tool become CorelDRAW objects, with the same editing properties as the objects you draw with the Rectangle and Ellipse tools.
- Trapezoids and parallelograms produced with the Smart Drawing tool become Perfect Shapes, explained in a moment.
- Other shapes you draw—triangles, arrows, stair-steps, and so on—become regular curved objects, but the Smart Drawing tool intelligently smooths out curves and straightens nearly straight line segments.
- *Perfect Shapes* are a special category of CorelDRAW objects, and they have special properties. They feature "glyph" nodes (by default, a red-filled diamond)—which are different from regular nodes along a path. These nodes—covered in the next section—can be manipulated to modify the shape without destroying any of its unique geometric properties (see Figure 8-1).

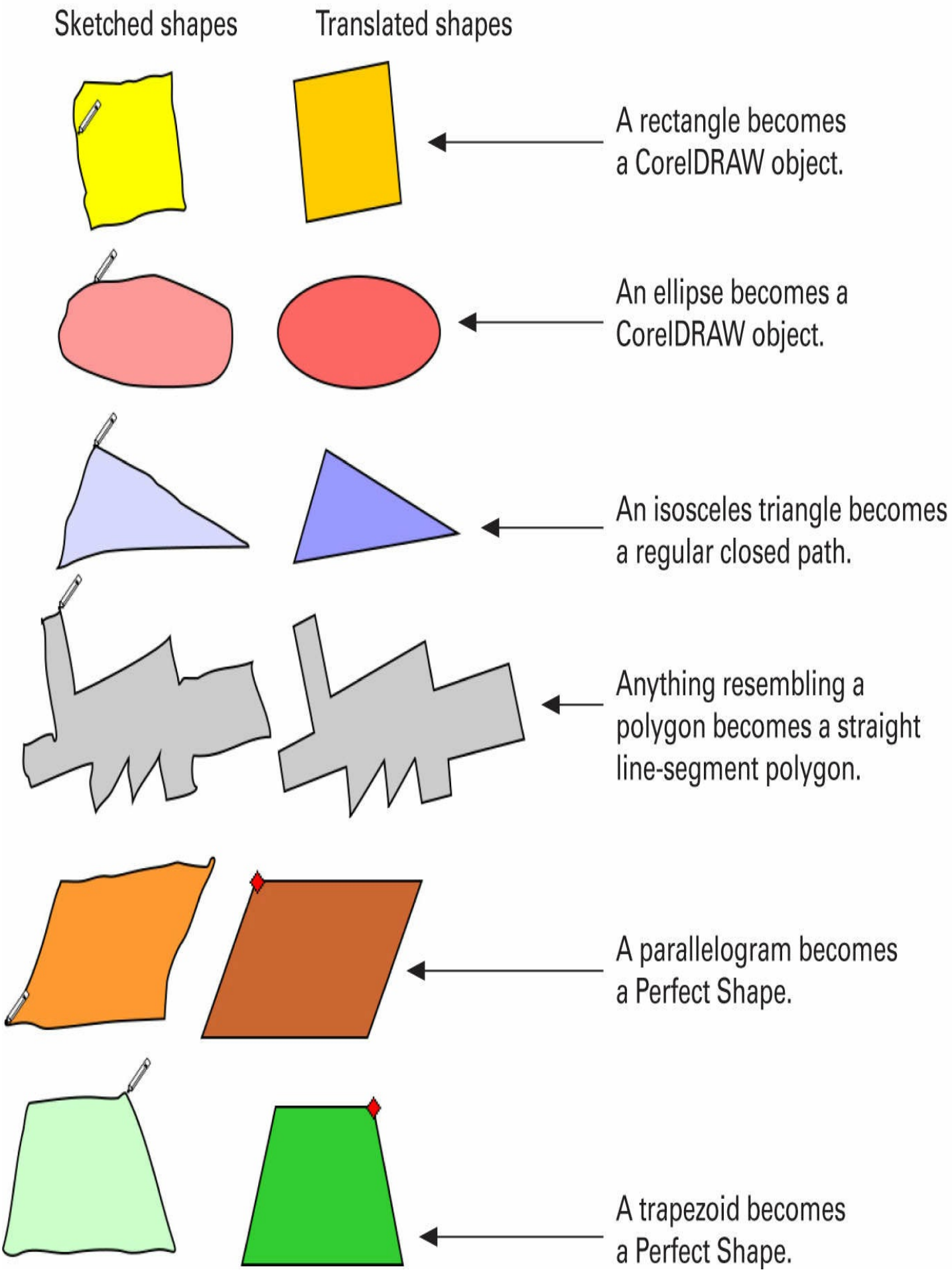

Sketched shapes
Translated shapes
A rectangle becomes a CorelDRAW object.
An ellipse becomes a CorelDRAW object.
An isosceles triangle becomes a regular closed path.
Anything resembling a polygon becomes a straight line-segment polygon.
A parallelogram becomes a Perfect Shape.
A trapezoid becomes a Perfect Shape.

FIGURE 8-1 **Perfect Shapes retain their properties even when you extensively edit their appearance.**

Try these next steps to create variations on the basic appearance of a Perfect Shape.

Reshaping a Perfect Shape

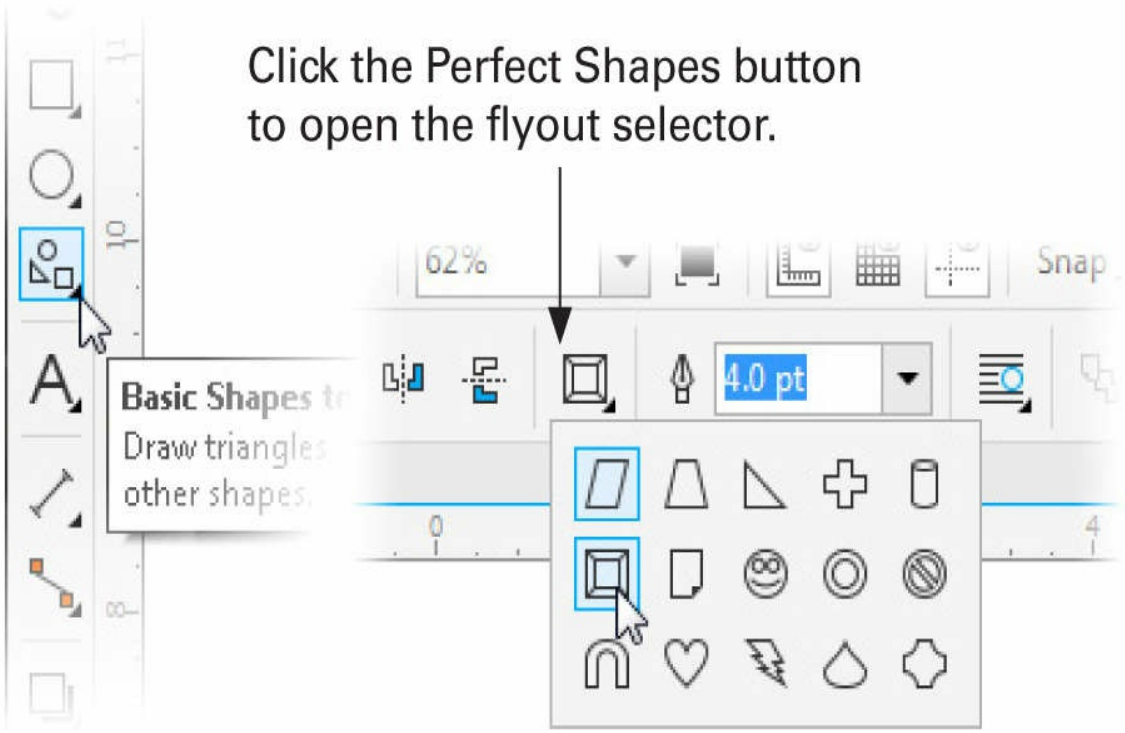
Tutorial

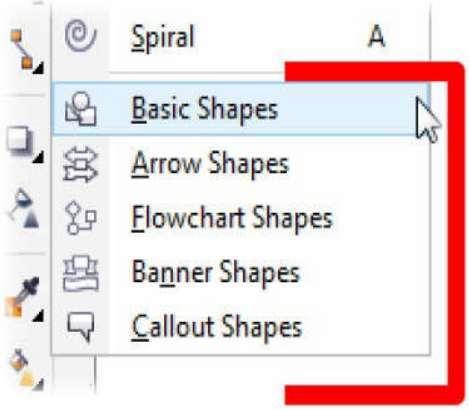
1. Using the Smart Drawing tool, sketch the shape of a trapezoid (refer to Figure 8-1). In a trapezoid, two sides are parallel and the other two sides converge. When you release the mouse button, CorelDRAW translates your sketch into a Perfect Shape.
2. Choose the Pick tool and then look at the Status Bar. The shape is identified as a Perfect Shape, a special category of shape. Use the Shape tool next to click-drag the glyph node. You'll see that the parallel sides remain parallel, and the converging sides slope away and toward each other. By duplicating this Perfect Shape, you can edit with the Shape tool and create an array of trapezoids, all different in appearance but all editable indefinitely, and all retain the geometric structure of a Perfect Shape.

Each of the translated shapes has its own special properties, which you'll learn in detail in the sections that follow.

Using Perfect Shape Tools

CorelDRAW gives you the power to create objects called *Perfect Shapes*. This group of tools (see Figure 8-2) helps you to draw shapes, many of which would be a challenge to draw manually, and some of which can be edited dynamically.


Click the Perfect Shapes button
to open the flyout selector.
62%
Snap
4.0 pt
Basic Shapes
Draw triangles
other shapes


Spiral A
Basic Shapes
Arrow Shapes
Flowchart Shapes
Banner Shapes
Callout Shapes

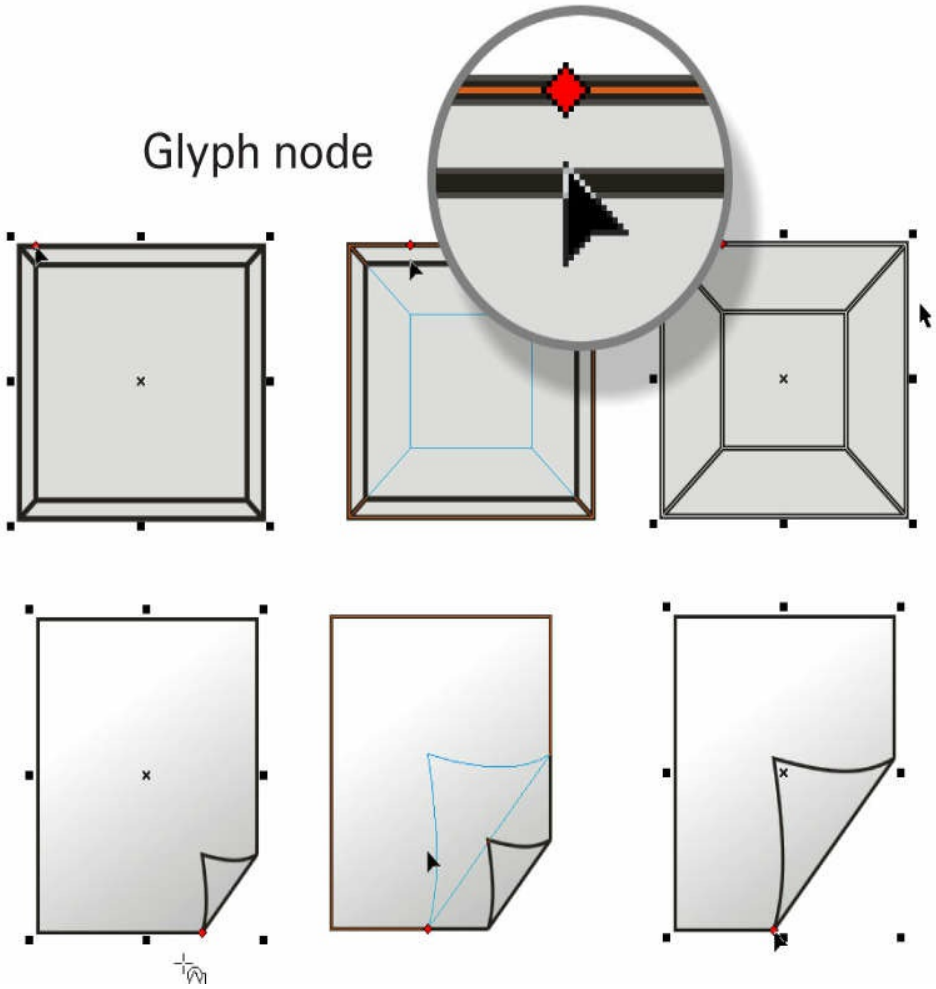

Glyph node

FIGURE 8-2 Glyph nodes can be used to control specific parts of these specially formatted objects.

Perfect Shapes often (but don't always) offer one or more control points called *glyph nodes*. These nodes allow you to edit specific parts of a specially formatted object dynamically, according to the shape's design. For example, the shape representing a dog-eared page features a single glyph node that changes the amount of curl to the page shape, or a glyph on a beveled rectangle shape enables you to set the bevel depth, as shown in Figure 8-2.

In Figure 8-2, you see a group of Basic Shapes tools beneath the Graph Paper and other manual shape tools (covered in Chapter 5). Once you've selected a specific Perfect Shape tool, a collection of shapes becomes available on the Property Bar. Choose a specific type of shape from the Property Bar's Perfect Shapes flyout selector, shown next, *before* drawing.

Note As you work through the shapes, you will see that not all the presets have glyph nodes and therefore do not offer variations, once created, using glyph nodes. The shapes in the Flowchart Shapes group, for example, are not adjustable Perfect Shapes. If you need to adjust a preset shape manually, you're better off selecting it and then pressing CTRL-Q to convert the shape to a curve, which makes the preset shape infinitely editable with the Shape tool.

Walk through the following simple steps to arrive quickly at a level of perfection in your CorelDRAW design work.

Creating Perfect Objects

Tutorial

1. Choose a Perfect Shape tool by clicking the Toolbox flyout and selecting a category.
2. On the Property Bar, click the Perfect Shape selector and choose a symbol. Use a click-drag action to define a size and position. For all symbol types, except Callout, the direction of your click-drag won't matter because the symbols are created using a fixed orientation. For Callout shapes, the direction of your click-drag determines the object's orientation.
3. Once your shape has been created, you may notice it includes one or more glyph nodes

that control certain symbol properties. In cases where more than one glyph node exists, the nodes are color coded. To position a glyph node, choose either the Shape or the Perfect Shape tool from the Toolbox, and then use a click-drag action directly on the node itself.

4. Once your object has been created and any glyph node editing is complete, your other Basic Shape properties (such as outline and fill) can be changed in the usual way. For example, you can change the width or height of your new shape using the selection handles available.

Editing Glyph Nodes

Glyph nodes are edited similarly to the control points on a polygon. As they are moved, the glyph nodes often have the effect of resizing, changing proportion, or dynamically moving a certain part of an individual symbol. Complex symbols can include up to three color-coded glyph nodes.

To explore glyph node editing, take a moment to try this:

1. Choose the Banner Shapes tool from the Shapes group on the Toolbox.
2. On the Property Bar, click the Perfect Shapes flyout button to expand the list and then choose the second preset shape.
3. Using a click-diagonal drag action, create a new shape on your page. Notice the shape includes two glyph nodes—one yellow, one red.
4. Click-drag the yellow glyph node up or down to reposition it several times. Notice that its movement is horizontally constrained; as it is moved, the vertical width of each portion of the banner changes.
5. Click-drag the red glyph node left or right to reposition it several times. Notice that its movement is vertically constrained; as it is moved, the horizontal width of each portion of the banner changes to match your movement, as shown in Figure 8-3.

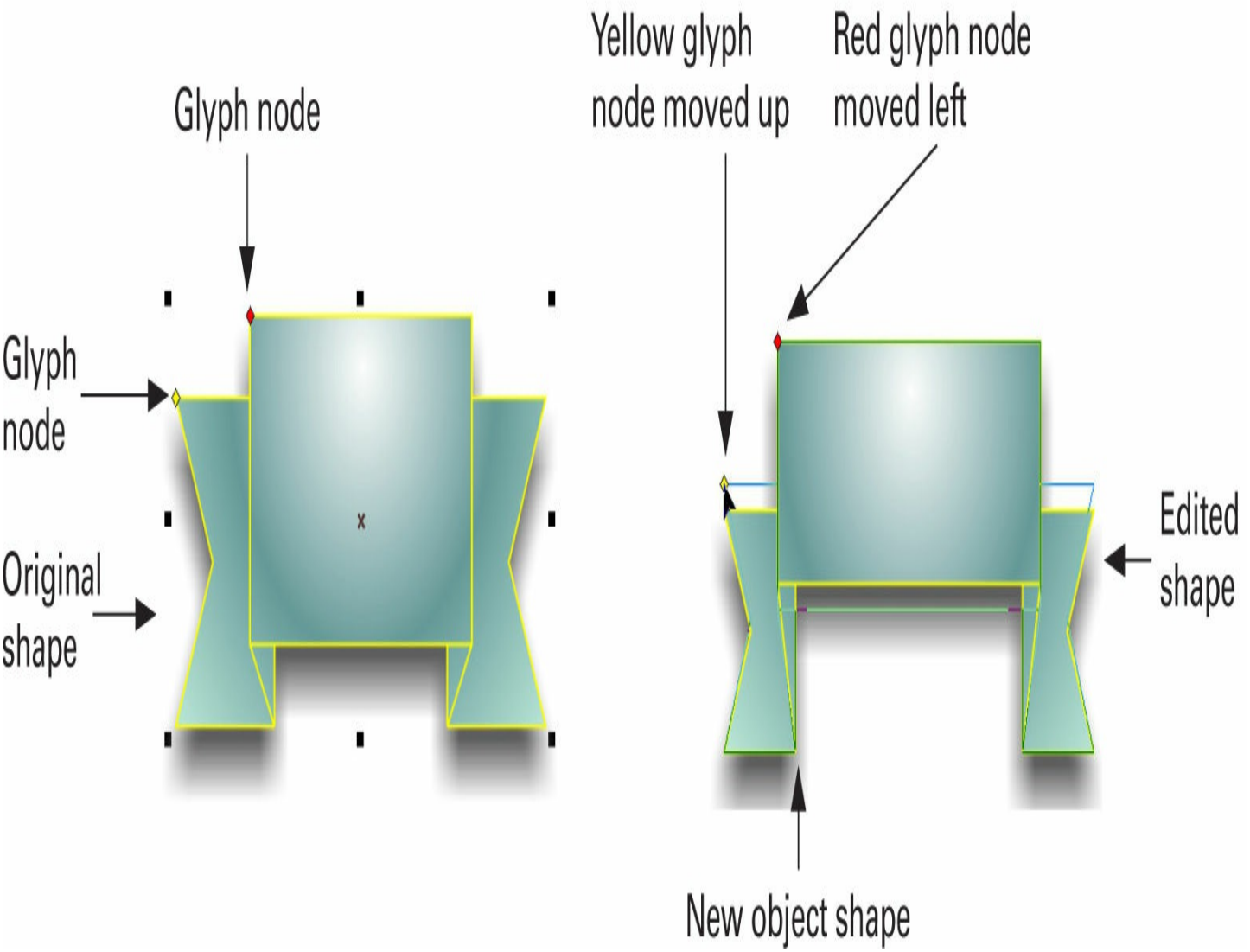


FIGURE 8-3 When movement is vertically constrained, the width of each portion of the banner changes.

Glyph nodes can be edited using both the Perfect Shape tool you used to create the shape and the Shape tool (F10). You can also edit glyph nodes by using the Object Properties docker for a selected Perfect Shape, as shown in Figure 8-4. This docker offers precise control over glyph node position; just right-click your shape and choose Object Properties from the pop-up menu, or press ALT-ENTER. Depending on the Perfect Shape you've selected, the Object Properties docker might display one, two, or more controls.

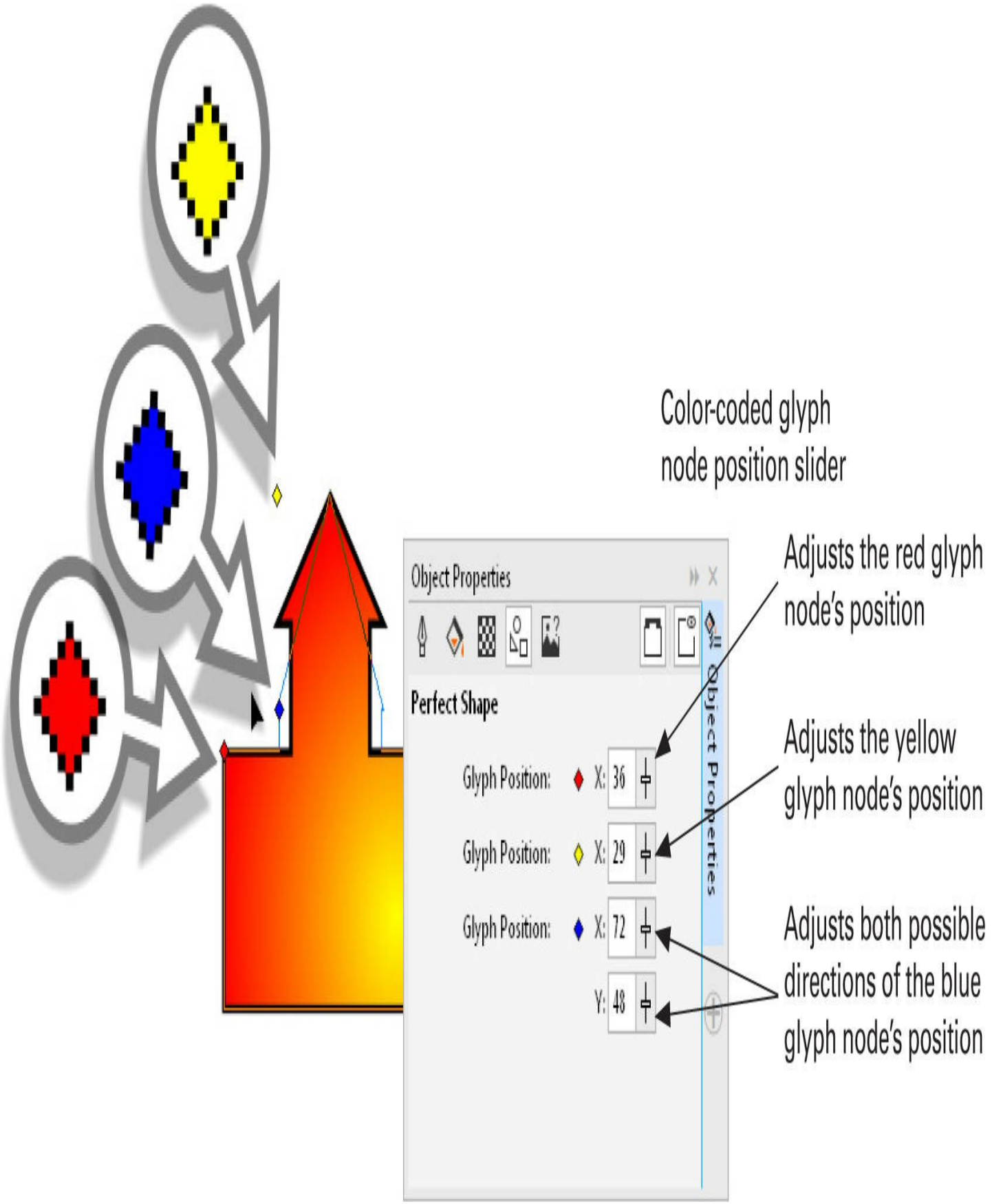
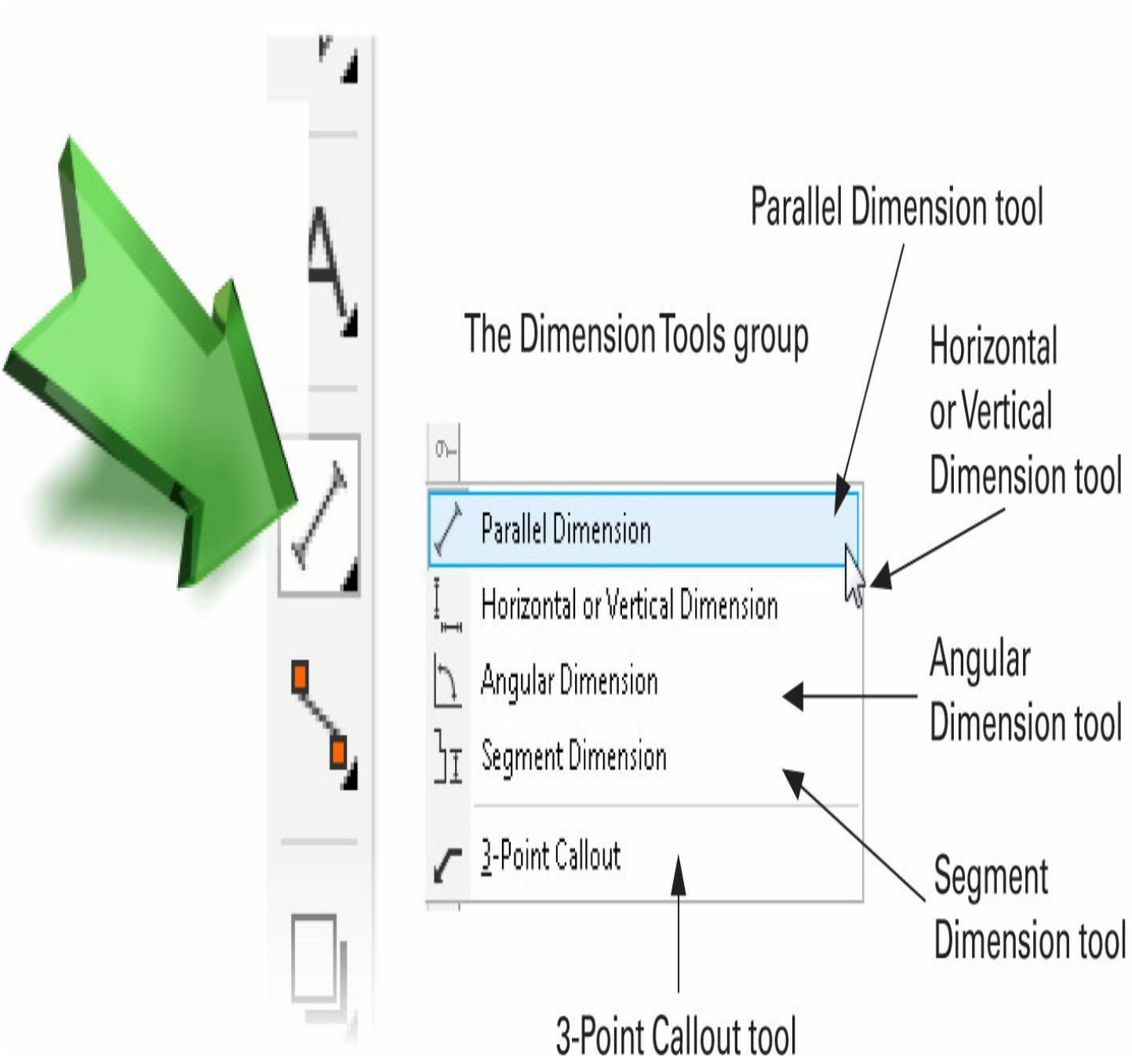


FIGURE 8-4 **Use the Object Properties docker to edit glyph nodes.**

Tip You can adjust the glyph nodes of the Perfect Shapes you create using either the tool you used to create the shape (you can edit a selected Perfect Shape arrow with the Banner Shapes tool) or the Shape tool (F10) at any time in the future.

Working with the Dimension Tools

If you need to annotate a drawing or an imported bitmap image with dimensions or labels calling out, for example, different parts of a machine, you'll want to use the Dimension tools (shown next), which are expressly for this purpose. The lines you create with the four Dimension tools will tag the bracketed area with the units of measurement of your choice, and they dynamically update when you scale them. The 3-Point Callout tool is for adding text to a wide selection of arrowhead lines; you can choose a line style for the connector as well as a width, a type of arrowhead, and any style of typeface you have installed on your system. The text labels for callouts are also upright, regardless of whether you rotate the line, and a Callout Control line can be edited at any time with the Shape tool (F10).



Using Dimension Tools

When a Dimension tool is selected, the Property Bar displays options to specify the style, precision, and unit values of your displayed dimensions, and to control the display and appearance of the labeling text, as shown in Figure 8-5 and detailed in the following list.

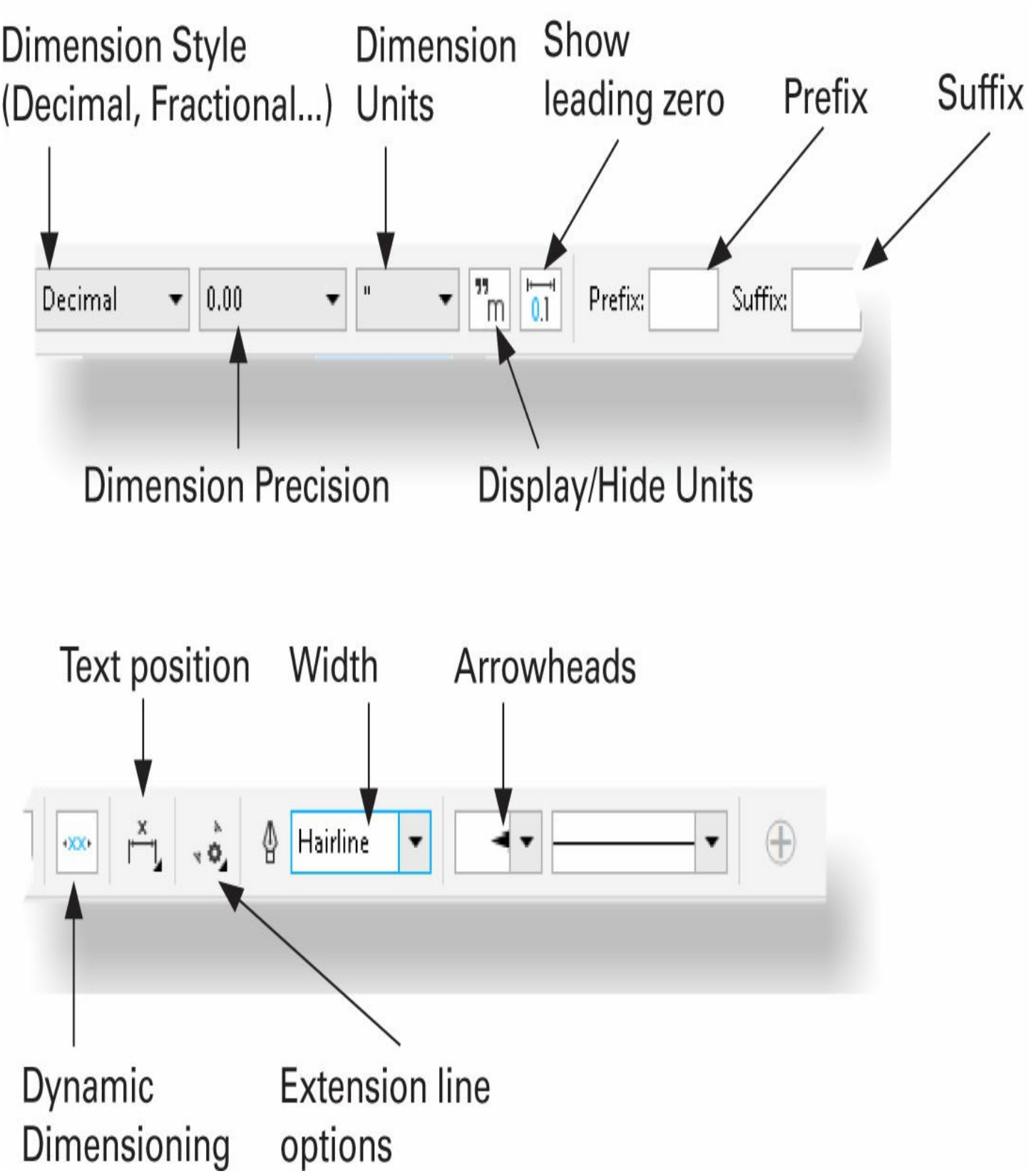


FIGURE 8-5 **The Property Bar offers specific modifications to your Dimension lines.**

- **Dimension Style** This option is used to set Decimal, Fractional, or Standard

measuring conventions; the default is Decimal.

- **Dimension Precision** This option is used to set a level of precision. When using Decimal as the measuring style, you can specify precision up to ten decimal places. When using Fractional, you can specify precision using fractions up to 1/1024 of a selected unit measure.
- **Dimension Units** This option specifies the measurement unit with which to display your text labels. You can choose any of the unit measures supported by CorelDRAW.
- **Display Units** This is a toggle button. If you don't want units appended to a dimension, leave the button turned off before you create a dimension line. Alternatively, you can click the dimension line itself—not the dimension numbers—to change the visibility of the units. If you accidentally click the text instead of the units, you'll get the option to change the font and other text-related options.
- **Show Zero Leading** When a dimension has a value of less than 1 (a tenth of an inch, for example), you can add a 0 before the decimal or choose to leave it off by toggling this button (the non-depressed state). If you have a series of columns of dimension lines, adding the leading zero will help keep the values aligned to the left or right.
- **Prefix/Suffix for Dimension** With this feature, you can enter your own text so it appears before and after the text label for your dimension line. For example, you can specify a style of merchandise, such as "Plastic" or a "Children only"–sized garment. Prefix and suffix text may be any character you want and may be applied before or after the dimension line has been drawn.
- **Dynamic Dimensioning** This option lets you specify whether your measurement values are updated automatically as the size of the dimension line is changed. By default, this option is turned on for all new dimension lines. If you plan on resizing or changing the scale of your drawing after creating the dimension lines, disabling this option freezes the values being displayed so they remain fixed, whether your dimension lines are resized or not.

Tip If, for some reason, resizing a drawing applied with dimension lines causes the measured values to change, you can right-click the dimension line and choose Break Dimension Apart from the pop-up menu as a workaround.

- **Text Position** This drop-down list lets you specify a position for the text labels applied to your dimension line. You can choose Text Above Dimension Line, Text Through Dimension Line, or Text Below Dimension Line. There are additional choices: Center Text Between Extension Line, Force Text Horizontal, and, finally, Draw Box Around Text.

Checking Out Dimension Lines

The following steps walk you through the techniques used to build dimension lines. Let's pretend in the Ancient Vase.cdr file that the drawing of the antique vase is to size: it's 6¾" tall if it existed in the real world. Your assignment is to respond to an antique dealer who wants to know the overall height of the vase, the height of the neck, and the angle between the top of the bowl and the base. Moreover, she wants the drawing marked with fractional values and thinks metric amounts are for nerds and scientists. People go a little overboard when it comes to cataloguing antiques, but your success is ensured because you have the following steps to guide you.

Using Dimension Lines

Tutorial

1. Open Ancient Vase.cdr and then select the Horizontal or Vertical Dimension tool from the Toolbox.
2. Click-drag from the top of the vase to its bottom, where you release the mouse button. With this tool, direction is set to vertical or horizontal by the direction in which you first drag.
3. On the Property Bar, set the Dimension Style to Fractional. If you'd set the Dimension Style as the first step, DRAW would assume (without a line already created) that you want this style to be the default (hint: you probably don't).
4. Move the cursor to the right without holding either mouse button. Doing this defines a position for the control text, so make sure your cursor position is far to the right of the vase drawing. You need to leave space for other dimensioning data you'll create.
5. Click. You're done, and the number value is called out now.
6. Choose the Parallel Dimension tool; the neck of the bottle is slightly slanted, so this is the appropriate measuring tool.
7. Click-drag from the top of the neck to the part that joins the neck with the bowl; release the mouse button at this point.
8. Move the cursor to the right, away from the drawing but to the left of the first dimensioning line, and then single-click to add the dimension line and number value.
9. Choose the Angular Dimension tool.
0. Click-drag from the junction of the neck and bowl on the left (you're creating a perfectly horizontal line) and then drag to the left. Release the mouse button when your cursor is about 3 inches left of the junction.
1. Move your cursor up and to the right so it touches the top-left point of the vase's neck.
2. Click. You're not finished yet. You now have the opportunity to set the position of the

arc. Move your cursor toward or away from the vertex of the two angular lines and then click.

3. If any of the text elements are too small in your judgment, click on the text with the Pick tool. Then, on the Property Bar, type in a new font height or even change the font if you so choose. Figure 8-6 shows the completed assignment.

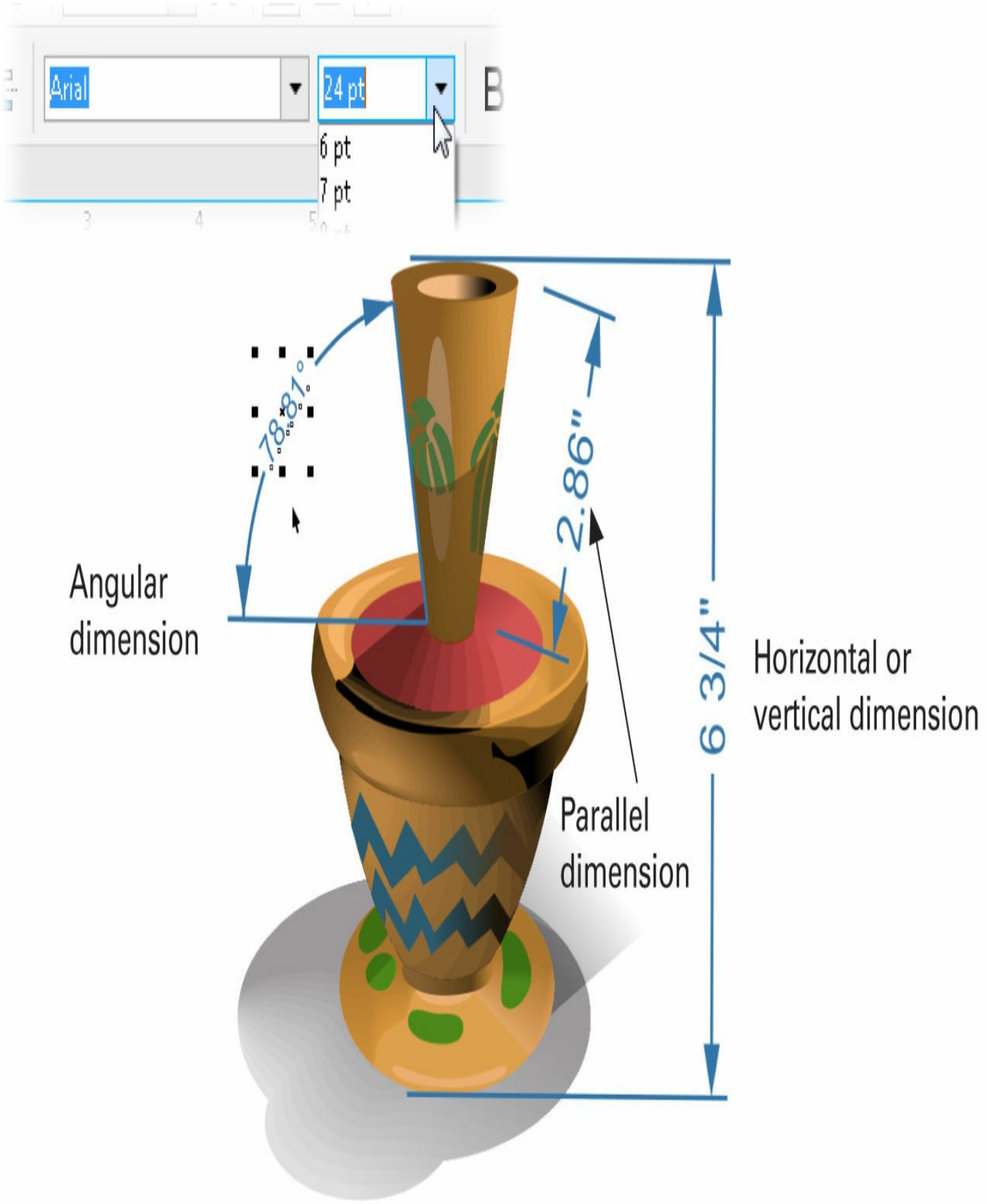


FIGURE 8-6 **Use dimension lines to annotate drawings and images quickly and accurately.**

Segment Dimensions

Whether you need to discover a value for technical comparison's sake or just want to make sure a part of a personal illustration is an exact length, the Segment Dimension tool is your ticket. This tool measures the distance between nodes on a path, whether the nodes are on a straight line or a curve.

To use this tool, first select a line in your composition with the Pick tool. Choose the Segment Dimension tool and then marquee-select the two nodes you want to discover the distance between. Move the cursor away from the selection to create handles that bound the selected nodes and then click.

An Exercise in Dimensioning to Scale

All of the preceding information and examples are fine in theory; now, you're going to put the theory into practice in the next tutorial. Let's say you've been handed a CorelDRAW document with a photo in it. Your boss—or any other person who is intimidating—wants the parts of the toy water pistol called out, but here's the catch: the image of the water pistol is *not* 1:1. So how does one measure all the parts of a 7½" long toy that is 5¾" on the CorelDRAW page?

Drawing Scale, Windows Calculator, and Dimension Lines

Tutorial

1. Open the file The Martian Soaker.cdr. This toy is an exact replica of what NASA let Mark Watney take with him, except he lost it in the sandstorm.
2. Choose the Horizontal or Vertical Dimension Line tool and drag it from the left edge of the green water reservoir to the right of the green nozzle on the other end of the water pistol. Write this value down.
3. The boss says the body is 7½". In this example, the body length should be 4.75". You launch Windows Calculator (or use the physical home version next to your saved coupons in the kitchen). Divide 7.5 by 4.75, which equals 1.578. This is the value by which this document's drawing scale must be adjusted.
4. Right-click over a ruler, choose Ruler Setup, and then in the Ruler Options box click Edit Scale.
5. Page Distance should be 1 inch. Type **1.578** in the World Distance field, and then click OK to apply this new scale (see Figure 8-7).

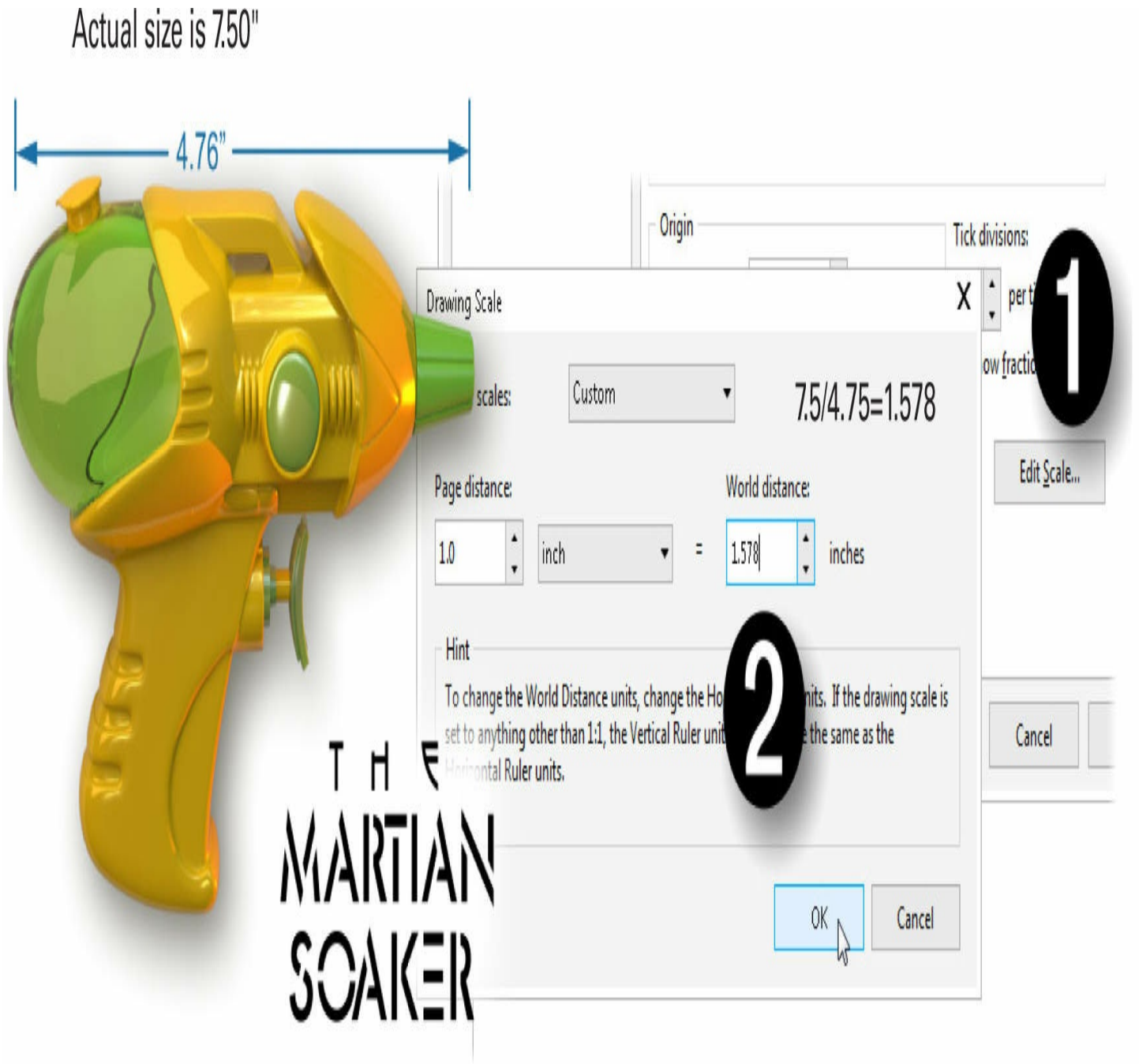


FIGURE 8-7 Adjust the World Distance scale to make measuring areas in photos and drawings accurate to scale.

6. Use the Horizontal, Vertical, Parallel, or Angular Dimension tool to measure anything asked of you in this, or your own, drawing.

When Fractional styles are combined with reassigning line and fill colors for text, you'll have a highly detailed, picture-perfect presentation for the manufacturing department and even print ads, as shown here.

Working with Callouts

When using the 3-Point Callout tool, you produce two elements: a line composed of two segments (the "Callout," as it's displayed on the Status Bar) and the control text. Callouts are not bound to an object; they can be moved anywhere on the page. However, the text and the line are linked and are not moved independent of one another. You have a number of options on the Property Bar:

- **Callout line width** By default, you always begin a callout with a Hairline width in blue. It's not such a good idea to adjust the width before drawing a line, because doing so triggers an attention box that asks whether you want the default line width—for any

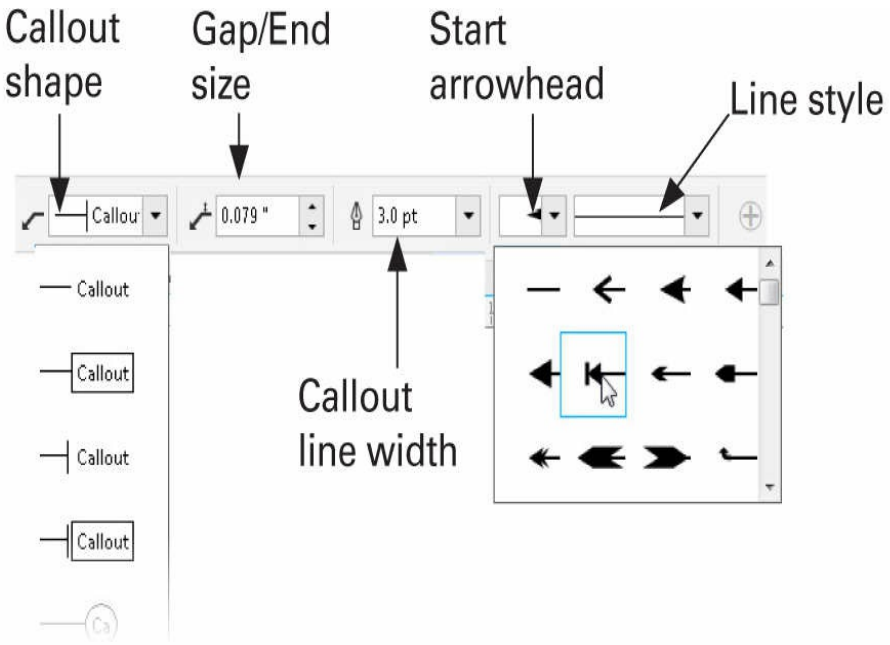
object you draw, not just callouts—to be changed. Instead, create your callout and *then* adjust the width while the callout is selected. Because the callout belongs to the general class of line objects in CorelDRAW, you can change the color of the callout line by right-clicking a color well on the color palette while the line is selected.

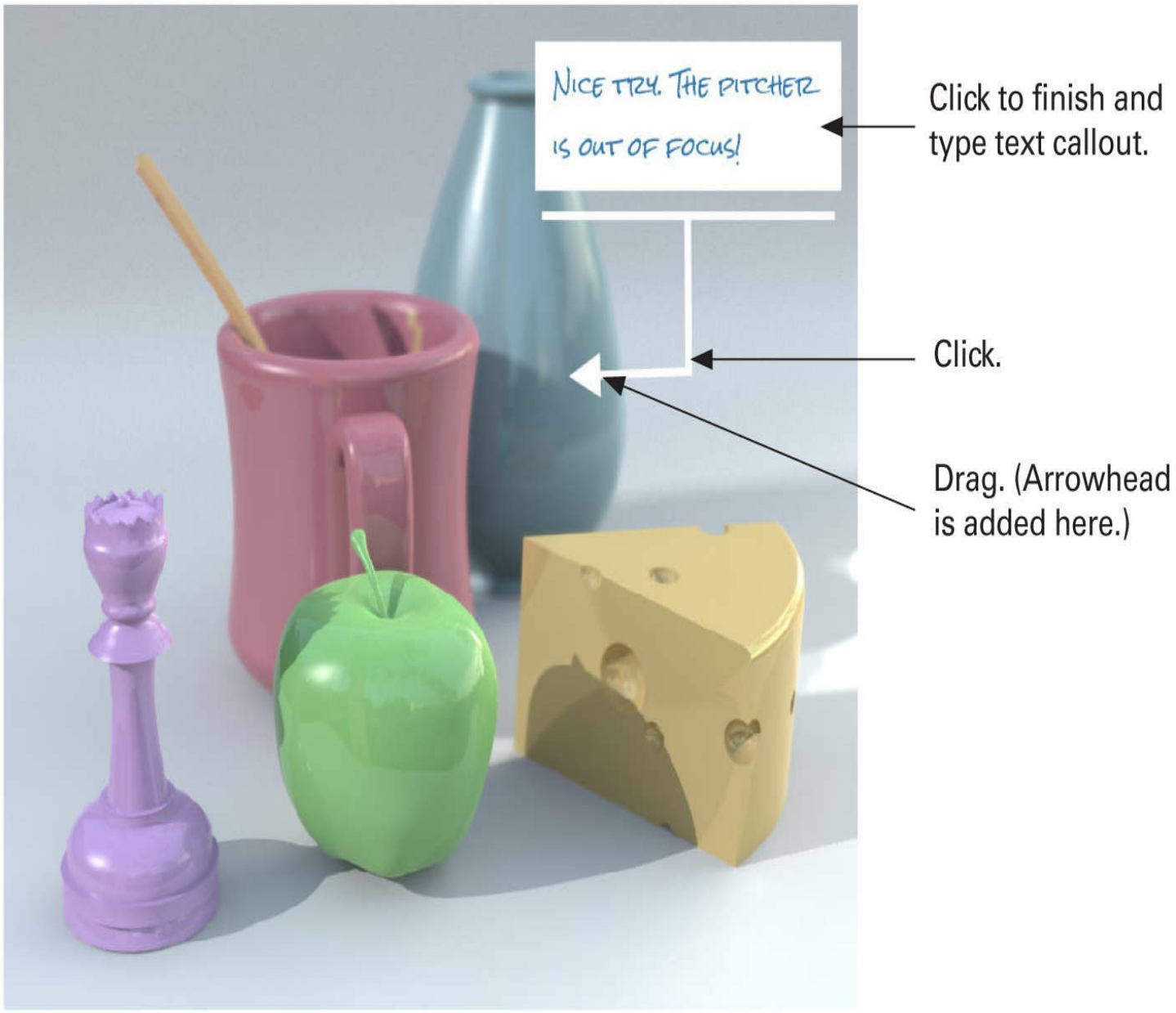
- **Start arrowhead** This drop-down list will seem familiar if you've ever applied an arrowhead to a line using the Property Bar. The same basic styles are available as they are on the Start Arrowhead collection. You can even use an arrow *tail* for a callout.
- **Line style** Like any other line you draw with the Pen or other drawing tool, the callout can be solid, dashed, or a series of dots. Choose a style by clicking the pop-up box and then click a style thumbnail.
- **Callout shape** You set the style for the callout text from this pop-up list of presets. The symbol doesn't affect the font—it's a style, such as a rectangle bounding the text or a straight line butted above or below the text. The symbols add an element of polish to your presentation.
- **Callout Gap/End size** This setting determines the distance between the tail of the callout line and the beginning of the text. It happens when the default Callout shape at the top of the list is chosen as a preset shape for the callout text. If you use a circle or other shape, this spin box sets the size of the circle, box, or other shape that surrounds the text.

After creating a callout, you can select the text with the Pick tool, right-click to choose Object Properties from the contextual menu pop-up, and use the newly enhanced and redesigned Object Properties docker to edit all aspects of the text, from font to size to color. You can even apply a gradient fill to your text right from the Object Properties docker (if you want your text to be illegible).

To use the 3-Point Callout tool, follow these steps:

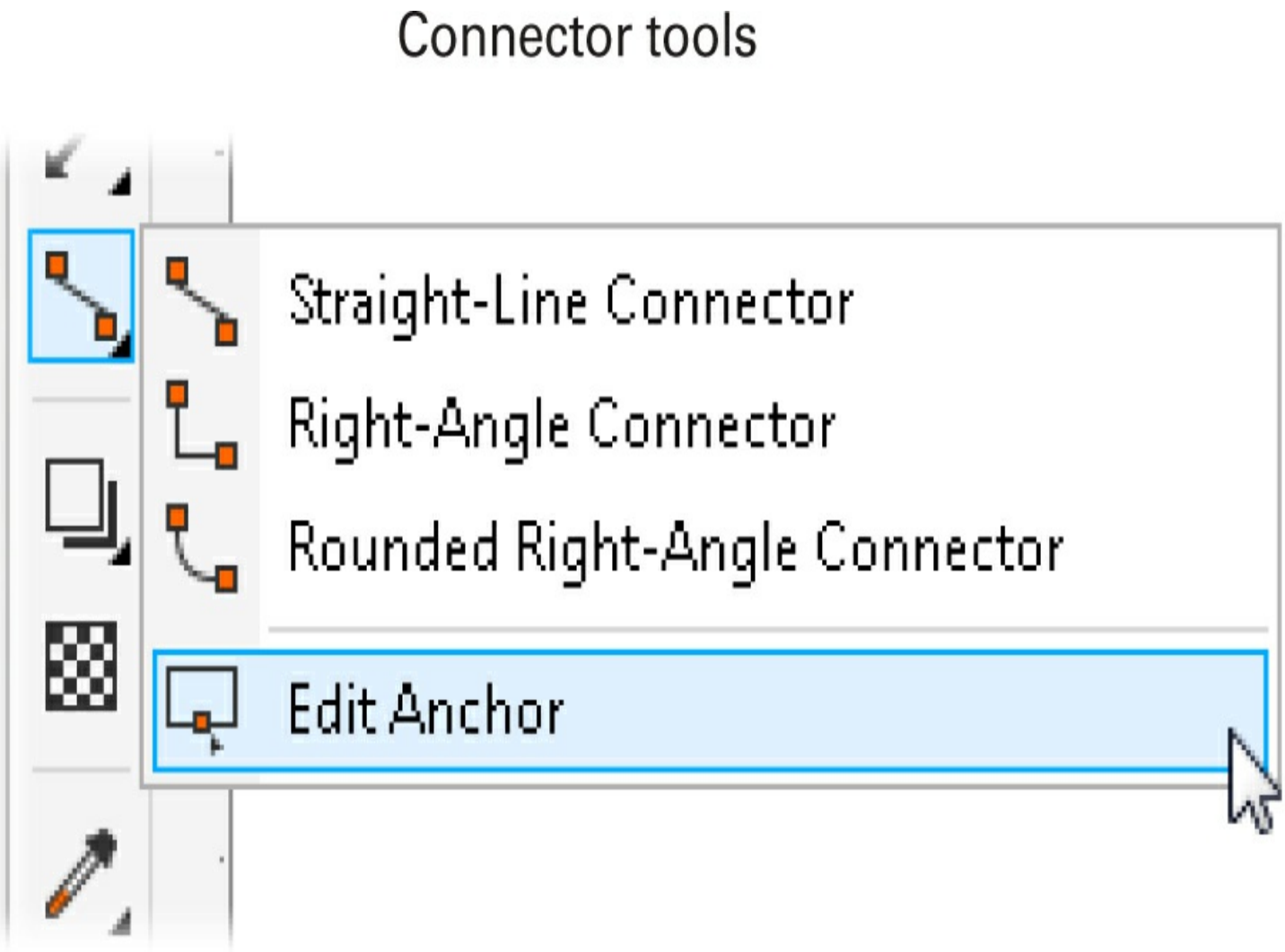
1. If you like, open the Bric a brac.cdr file. There are different shapes, colors, and sizes on the objects in the picture, ideal for getting some exercise working with the Callout tool.
2. Click-drag to create a point where you want the callout to end (the node will eventually have the arrowhead). Move the cursor to where you want the "elbow" of the callout line and then click.
3. Move your cursor to where you want to place the control text and then click.
4. Begin typing the callout text.


Callout shape
Gap/End size
Start arrowhead
Line style
Callout line width
Callou
0.079 "
3.0 pt
Callout
Callout
Callout
Callout

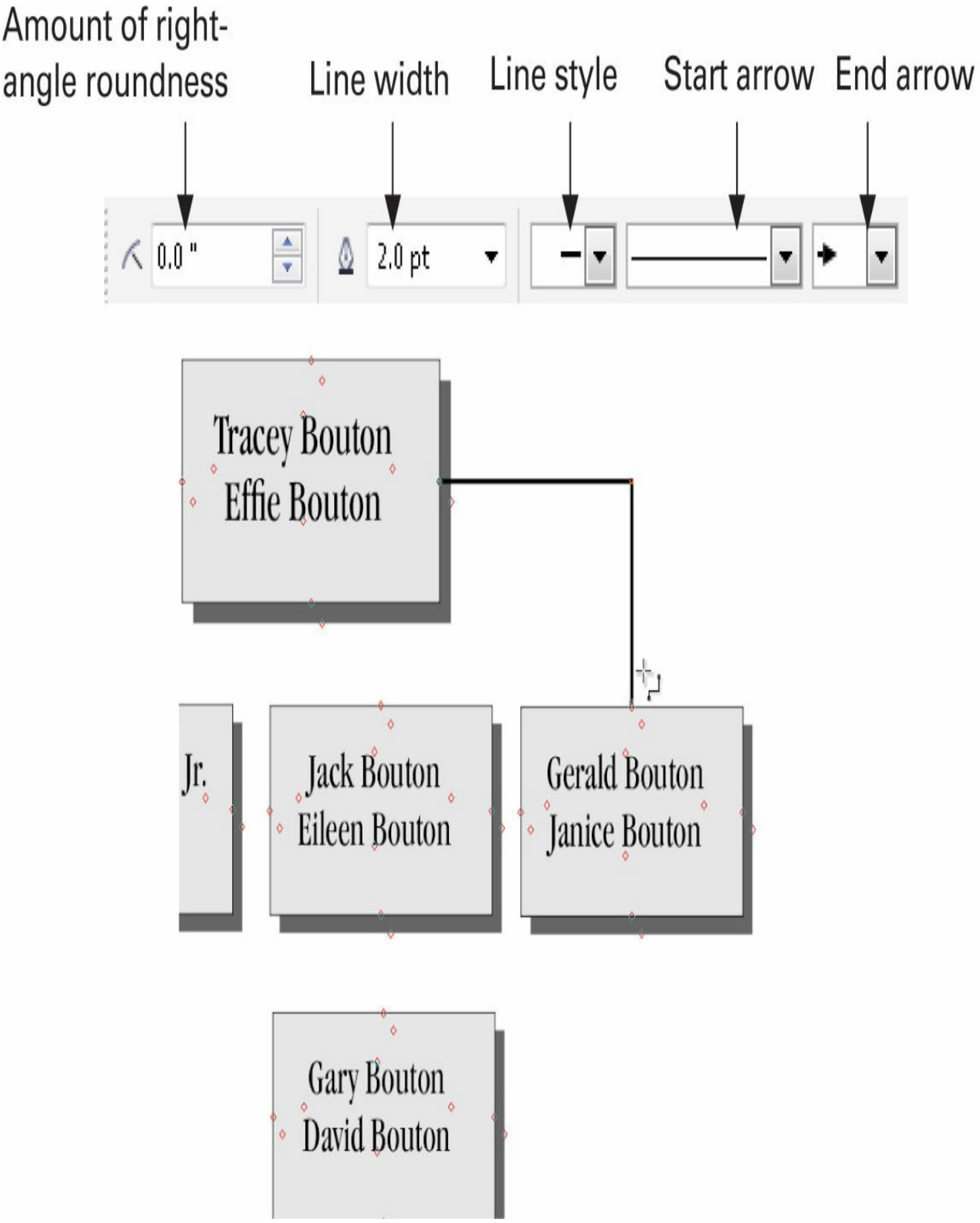

NICE TRY. THE PITCHER IS OUT OF FOCUS!
Click to finish and type text callout.
Click.
Drag. (Arrowhead is added here.)

The Connector Tools

The Connector Tools group is so self-explanatory, it's almost not necessary to cover how they work here. Connector lines come in one straight segment, a right-angle, and a rounded right-angle, and there's also an Editor tool, shown in the following illustration, to modify the exact location of the connector line relative to the object (or group of objects) to which the line is anchored.



There are more uses in everyday work for Connector tools than you might imagine. Everything from mapping genealogies, to org charts, to seating arrangements at receptions—these all need text in boxes and some sort of connecting line to establish relationships. The marvelous thing about DRAW's Connector tools is that once you've connected two objects, regardless of where you move an object, the connector line preserves the connection. This makes arranging and laying out complex hierarchical maps and charts a snap. Here, I am building my own genealogy chart.



As with dimension lines, you set connector line properties—arrowheads, line widths, colors, and others—after you've created the connector line.

Tables

With CorelDRAW's Table tool tucked into the Toolbox, you no longer have to struggle to present tabular data neatly and attractively in your documents. Creating data sheets or directories or displaying spreadsheet data no longer hinges on setting up elaborate networks of guidelines or paragraph text blocks with a generous handful of tab and column settings thrown in. Drag out a table with the new Table tool, or import a table from your word processor or spreadsheet program, and you're all set to use CorelDRAW's tools to make the data look good.

Creating a Table

You can create a new table with either the Table tool in the Toolbox or from the Create New Table command on the Table menu. If you use the Table tool to create the table, you can click-drag to position and size the table exactly where you want it to be inserted. If you create the table using the menu command, the table will be inserted in the center of the document. In either case, you can drag the table to a new position or resize it just as you would any other object, such as a rectangle that you create with Toolbox tools.

Using the Proper Tool for the Job

Customizing a table happens on several levels: the entire table, a single cell, and a range of cells. The content you place inside a cell, such as text or graphics, is controlled with the same tools and settings that would affect the content if it were not inside a cell. Which tool is active, and what you've selected with that tool, if anything, determines what customization options are available to you at that moment from the Property Bar or the menus.

Table Options When the Pick Tool Is Active

With the Pick tool, click anywhere in or on the table to select the entire table. You can use the Pick tool to select, move, resize, stretch, skew, or rotate the entire table. When the Pick tool has been used to select the table, the commands and options shown in Figure 8-8 appear on the Property Bar. These options apply to the entire table.

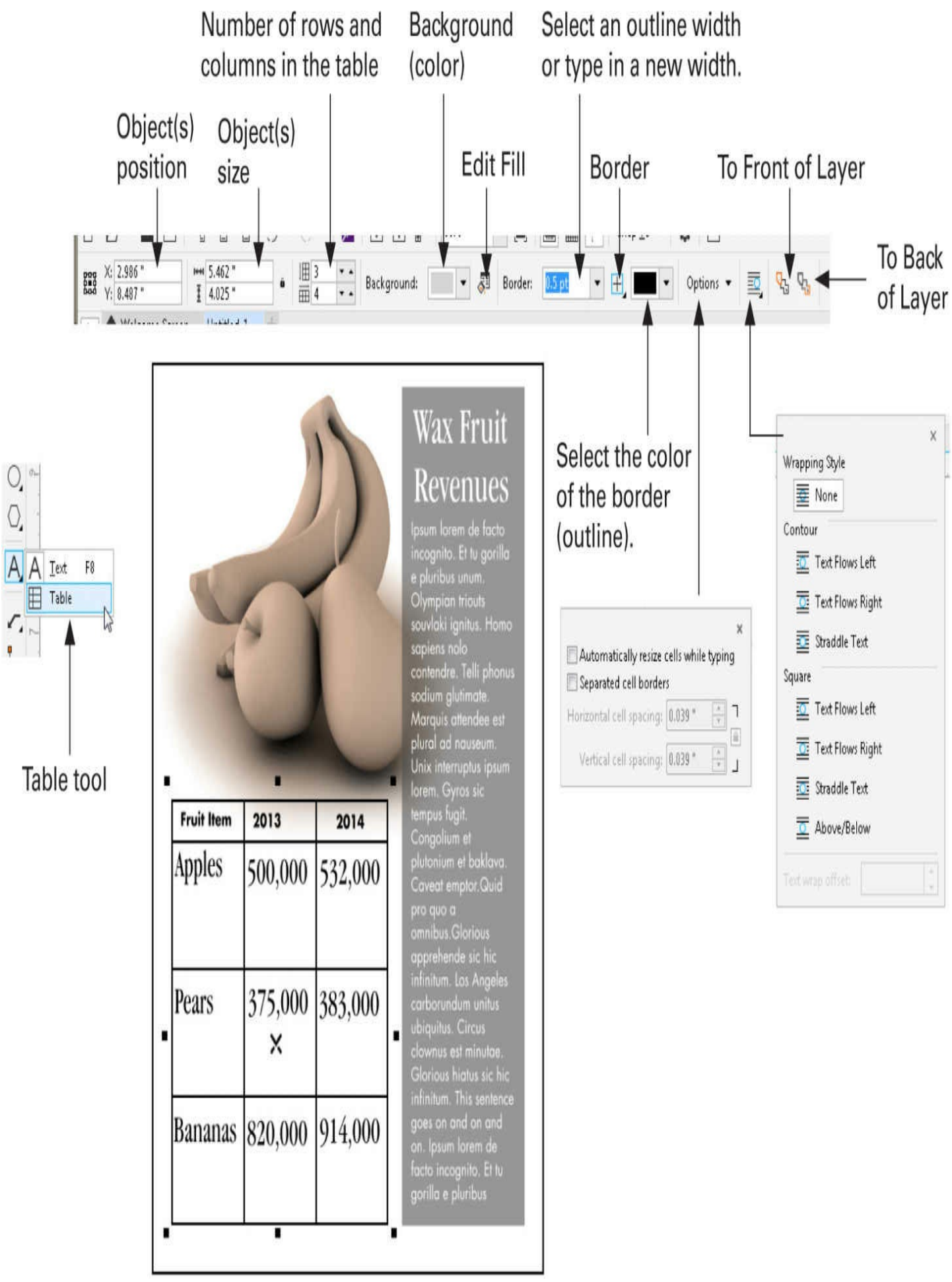

Number of rows and columns in the table
Background (color)
Select an outline width or type in a new width.
Object(s) position
Object(s) size
Edit Fill
Border
To Front of Layer
To Back of Layer
X: 2.986 "
Y: 8.487 "
5.462 "
4.025 "
3
4
Background:
Border:
0.5 pt
Options
Select the color of the border (outline).
Text F8
Table
Table tool
Wax Fruit Revenues
Ipsum lorem de facto incognito. Et tu gorilla e pluribus unum. Olympian triouts souvlaki ignitus. Homo sapiens nolo contendre. Telli phonus sodium glutimate. Marquis attendee est plural ad nauseum. Unix interruptus ipsum lorem. Gyros sic tempus fugit. Congolium et plutonium et baklava. Caveat emptor.Quid pro quo a omnibus.Glorious apprehende sic hic infinitum. Los Angeles carborundum unitus ubiquitus. Circus clownus est minutae. Glorious hiatus sic hic infinitum. This sentence goes on and on and on. Ipsum lorem de facto incognito. Et tu gorilla e pluribus
Fruit Item
2013
2014
Apples
500,000
532,000
Pears
375,000
383,000
Bananas
820,000
914,000
Automatically resize cells while typing
Separated cell borders
Horizontal cell spacing:
0.039 "
Vertical cell spacing:
0.039 "
Wrapping Style
None
Contour
Text Flows Left
Text Flows Right
Straddle Text
Square
Text Flows Left
Text Flows Right
Straddle Text
Above/Below
Text wrap offset:

FIGURE 8-8 **Use the Property Bar to customize the look of a table.**

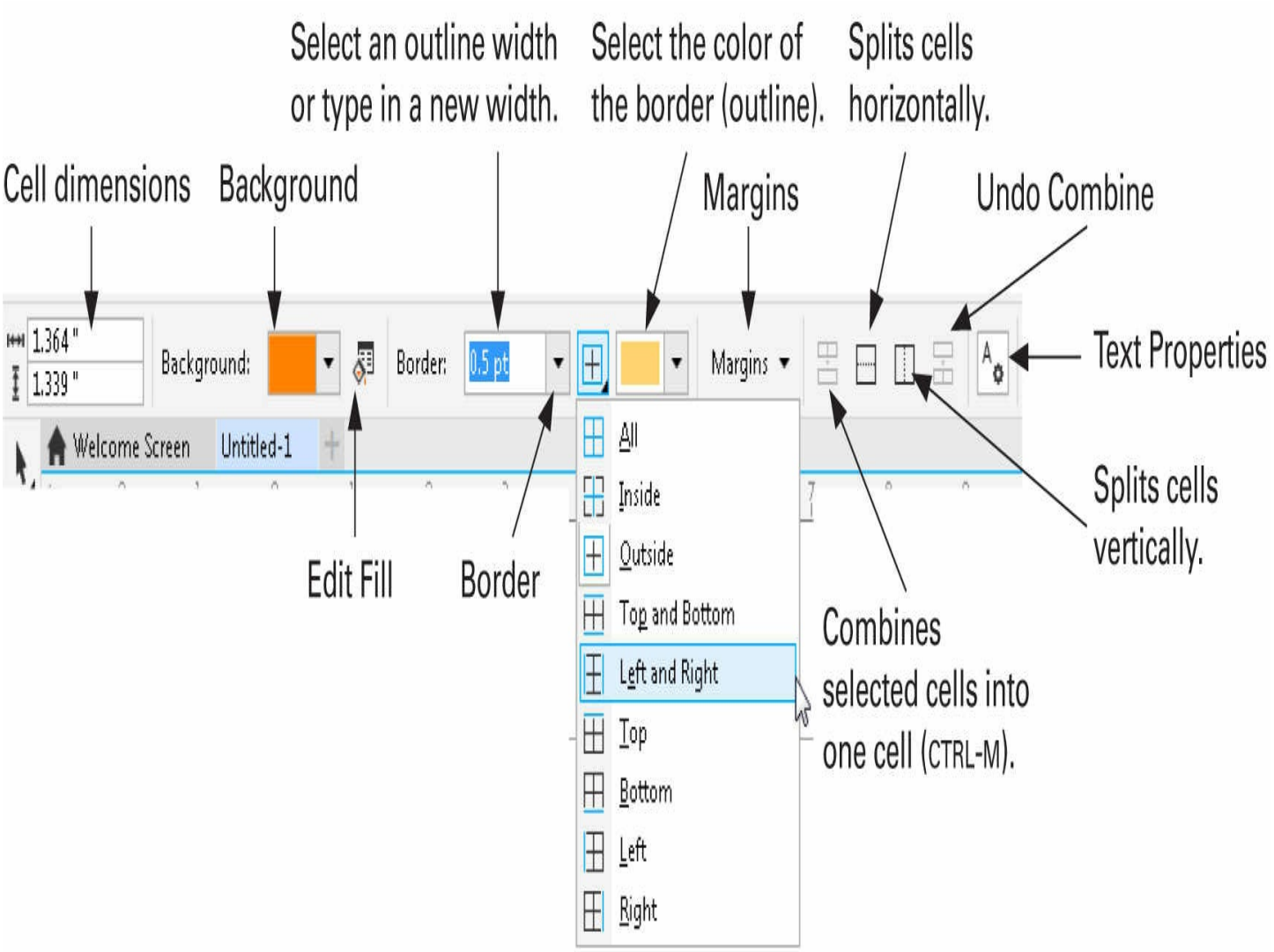
The table's position on the page and the overall dimensions of the table use the same common entry fields on the left of the Property Bar that other objects such as rectangles and polygons use. Other important options are as follows:

- **Number of Columns and Rows in the Table** Use the top control to enter the number of rows you want your table to have and the bottom one to enter the number of columns you require. You can change these entries at any time. For example, if a table currently has two columns and two rows, entering **3** in the column field and **4** in the row field immediately reconfigures the table so it contains the new number of columns and rows. If you reduce the number of columns or rows, they are removed from the bottom up and from the right to the left. Any content you have in the columns and rows is lost, so do this with forethought!
- **Background** Choose a uniform color for all the cells from this drop-down list. You can also accomplish the same thing by choosing a color from the color palette.
- **Edit Fill** If you've given the table a background fill, you can go directly to the Edit Fill dialog by clicking this icon. By default, tables are filled with a Uniform fill. If you want your table to have any *other* fill type, such as Fountain or Pattern fill, you can choose it right from the Edit Fill dialog.
- **Border** *Border* refers to the outline of each cell and the table as a whole. You can show or hide the interior cell outlines and/or combinations of the top, bottom, left, and right sides of the table.
- **Border Outline Width** This field applies a point outline width to the entire table, to a cell (CTRL-click to select one), or to the border specified in the Border drop-down.
- **Options** The options that can be set here are Automatically Resize Cells While Typing and Separated Cell Borders. The former is useful when the amount of content you need to enter in each cell is not uniform. Enabling this prevents your content from overflowing and moving out of view. The latter option lets you space out your cells horizontally and vertically so each cell is still contained in the table but is not in immediate proximity to the adjacent cell.
- **Wrap Text** This important option determines how *Paragraph Text* flows around the table and how close the Paragraph Text box can get to the table—this option has nothing to do with the text content of the table. Tables are objects; text can be made to flow around them or over them or under them. Artistic Text is not affected by the Text Wrap setting.
- **To Front of Layer and To Back of Layer** These icons become available if another object is layered on top of or below the table. Clicking these icons changes the position of the table in the stacking order.

Table Options When the Shape Tool Is Active

When you want to select a single cell or multiple cells in a table, use the Shape tool. To select a single cell, click in it with the Shape tool. To select adjacent cells, click-drag across the row(s) or column(s) that you want to select. To select nonadjacent cells, hold the CTRL key and click in the cells you want to select. Diagonal blue lines shade the cells you've selected. These lines are an onscreen visual indicator and not an actual fill.

Once cells are selected with the Shape tool, you can use the options available to you on the Property Bar, as seen in Figure 8-9, to customize the cells. The attributes you apply to cells override any you set for the table. The first control group on the left now will set the dimensions of the selected cells as opposed to those of the entire table. The Background and Border options work the same as before, but making changes with them now only affects the selected cells. New to the Property Bar are the Margins drop-down, which sets the top, bottom, left, and right margins within the cell's bounds, and a group of controls to merge or split the selected cells into fewer or more cells.


Select an outline width or type in a new width.
Select the color of the border (outline).
Splits cells horizontally.
Cell dimensions
Background
Margins
Undo Combine
1.364 "
1.339 "
Background:
Border:
0.5 pt
Margins
Text Properties
Welcome Screen
Untitled-1
All
Inside
Outside
Top and Bottom
Left and Right
Top
Bottom
Left
Right
Splits cells vertically.
Edit Fill
Border
Combines selected cells into one cell (CTRL-M).

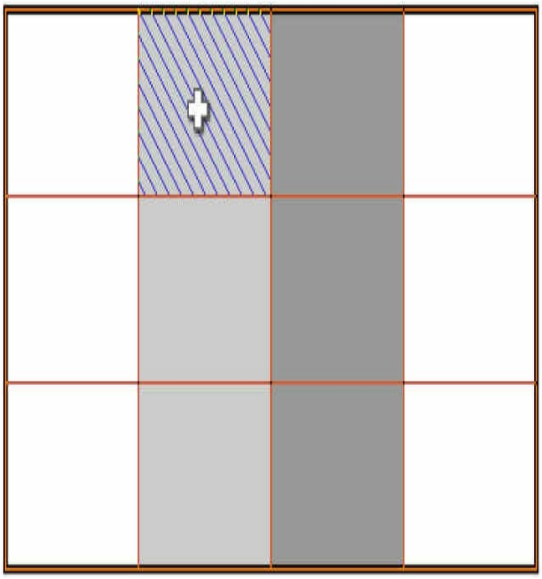


FIGURE 8-9 These options are available for customizing your tables when the Shape tool is active.

You can also use the Shape tool to select an entire column or row. With the Shape tool, click the left border of the table next to the row you want to select. When the cursor turns into a small arrow, click again to select that row, or click-drag to select additional adjacent rows. To select columns, click the top table border over the column you want to select, wait for the arrow to appear, and click again to select the column, or click-drag to select additional columns.

To select nonadjacent rows or columns, follow the preceding procedure, but hold the CTRL key and then click next to or over the rows and/or columns you want to select.

Editing a Table When the Table Tool Is Active

You use the Table tool to create a table by click-diagonal-dragging in your document, but you can *also* use it to edit the table once it is created. Right-clicking in a table row, column, or cell and then choosing the appropriate option from the Select menu in the context menu is a quick way to select a single row, column, or cell. To select the entire table, choose Table from the Select command on the pop-up menu.

The Table tool can also be used in the same way the Shape tool is used to select multiple columns and rows, but it is easier to use the Shape tool and avoid the possibility of creating a table instead of a selection.

You can insert or delete columns or rows in your table by clicking in a row or column and then choosing Delete | (Row or Column) from either the Table menu or the right-click context menu. You can insert a row or column by right-clicking at the juncture between two existing rows or columns and then choosing Insert | (whatever you like from the submenu) from the contextual pop-up menu.

Working with Text and Graphics in a Table

Entering text in a table is easy; just use the Table tool to click in a cell and enter text using any text-entry method. You can type text directly into the cell, import text from the File menu or from the Edit Text Box dialog (CTRL-SHIFT-T), or paste text into the cell from the Clipboard.

Text in tables is handled as Paragraph Text and can be proofed, edited, and formatted in the same ways. If you want to draw a Paragraph Text box within the table cell, you can do so by click-dragging the Text tool in the cell.

You can paste any graphic into a cell, but which tool you use to select the cell that will hold the graphic makes a huge difference. If you use the Shape tool to select the target cell, the graphic will be pasted into the center of the cell as a graphic object. If you use the

Table tool to select the cell and then paste the graphic into the cell, the graphic will be pasted in as an inline graphic whose size matches that of the default or current font size being used in that cell. This operation can take some time if the size reduction is great.

Once a graphic object has been placed in a cell using the Shape tool, you select it by clicking it with the Pick tool. You can then use the control handles to resize, rotate, and skew it. You can even extrude it if you like. If you want to move the graphic to another cell, select it with the Pick tool and drag it into a different cell in the table. You can drag a graphic *out* of a table, but you cannot drag a graphic into a table. However, if the graphic was placed using the *Table tool*, the object can be modified (scaled and so on) using the Type tool. When you place a graphic with the Table tool, the Pick tool will be of no assistance in working with the graphic.

Converting a Table to Text

You can convert a table into a single Paragraph Text box at any time by selecting the table and then choosing Table | Convert Table To Text from the menu. The Convert Table To Text dialog that appears offers you the option to separate the contents of each cell with a delimiter—a comma, a tab, a paragraph, or the character of your choice. If you choose to separate the cell contents with a comma, a tab, or one of your own choice, each row of cells will be saved to a paragraph with the individual cell contents separated in that paragraph by the delimiting character you choose. If you choose to separate cell contents by paragraph, you will get a paragraph for each cell.

Converting an Existing Text to a Table

Existing Paragraph Text can be converted into a table in a process that is basically the reverse of the process outlined in the previous section. Select the text you want to convert and then choose Table | Convert Text To Table from the menu. From the Convert Text To Table dialog, choose the delimiter you've used to break up the text into the chunks that you want to go into each cell. CorelDRAW analyzes the selected text and guesses what will work best as a delimiter. Because commas and tabs are frequently used within a section of text as delimiters, they might create many more cells than you were expecting. At the bottom of the dialog, you can see how many rows and columns will be created. If the number sounds wrong, cancel and go back to your original text in a text editor or a word processor. Mark the end of each piece of text you want transferred into a cell with some other character—an asterisk or a tilde, for example. Then choose User Defined and enter the character you choose as a delimiter into the field.

This chapter has demonstrated that DRAW can lend you as much—or as little—automated assistance as you need to get an assignment finished. That's one of the neat things about this program: just about every arena of business, or level of experienced artist, can find what they need easier than ever in this version, and do what everyone wants to do—reach the goal!

Chapter 9 catapults you from object creation into some creative and advanced object *editing*. See how to subtract one shape from another (this is great for drawing bolts and washers), how to perform some welding on a car, and how to make a virtual nutcracker. Is Chapter 9 going to be seriously educational or out-and-out fun?

The answer is, *yes*.

9 Editing Objects, Rearranging Paths, and Using Boolean Ops

Let's say you've drawn an object and you're fairly pleased with it, *except* for that little corner that you couldn't draw *just* right. This chapter shows you various techniques to massage that almost-perfect shape into *exactly* the shape you envisioned. Because every object you draw on a page can be broken down into rectangles, ovals, path segments, and so on, this chapter covers the tools and features for doing exactly this: breaking down shapes, combining them, subtracting a little of this, adding a little of that. Often, arriving at a design of your dreams can be realized by creating an approximation of the shapes you seek. Then, with a pull and a tug here and there, erasing a tiny area perhaps, you'll get your desired results faster than by creating the drawing from scratch. You'll also see in this chapter that you can add visual complexity and embellishments through editing that would be hard to achieve using other methods.

Note Download and extract all the files from the Chapter9.zip archive to follow the tutorials in this chapter.

Shaping and Reshaping Object Shapes

You have a choice of two places to begin when you want to edit an object: you can use operations (commands you make with the click of a Property Bar button) or the hands-on approach. Both approaches are covered in this chapter and will serve you well; your choice largely depends on what you need to edit and then what type of operation is required.

CorelDRAW has great shaping commands to speed the object-creation process, such as Trim, Weld, Intersect, and Create Boundary. You'll also find four other shape commands at your disposal: Simplify, Front Minus Back, Back Minus Front, and Create Boundary. In this section, you'll learn exactly how you can use these commands to shape and reshape your