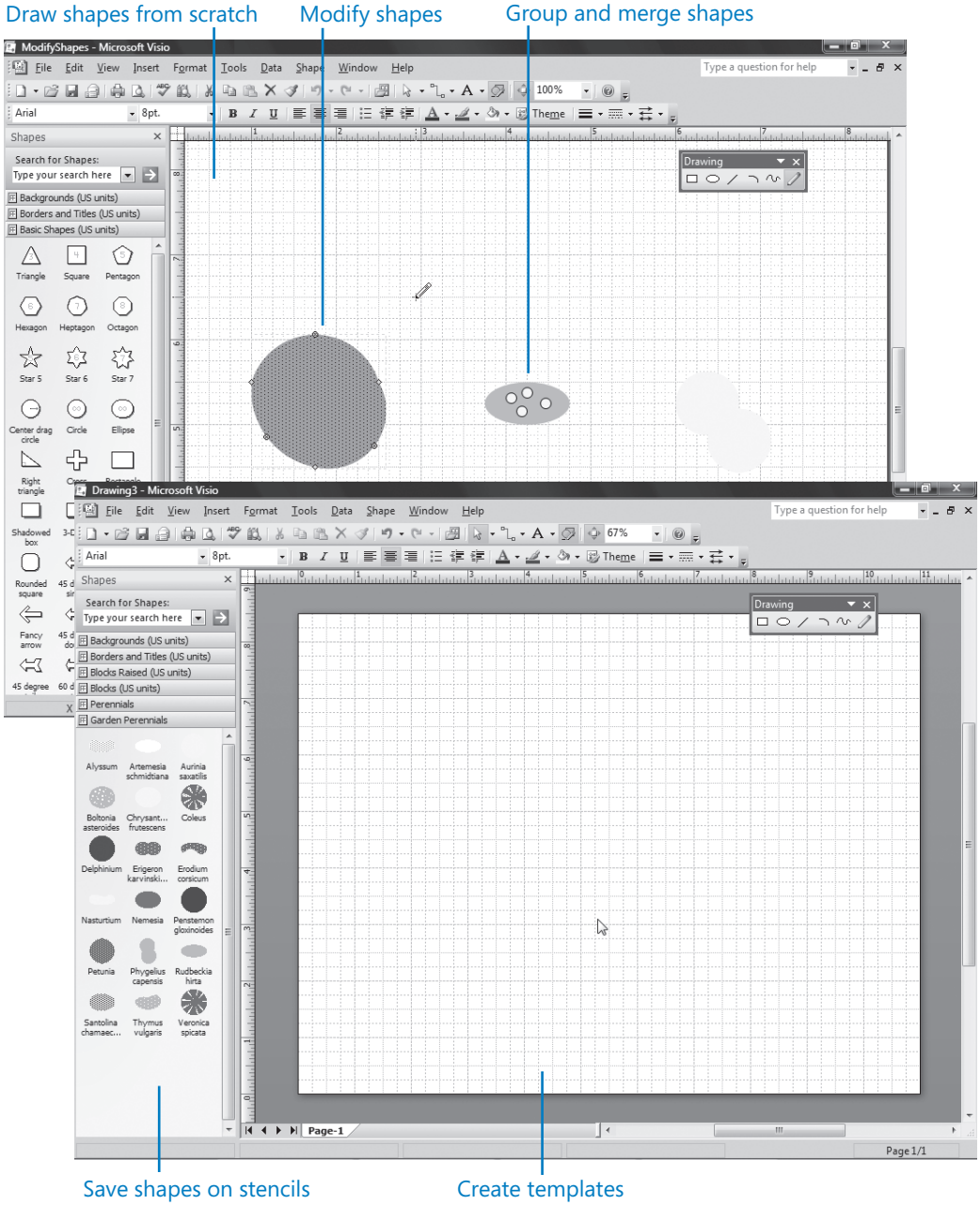
Chapter at a Glance



12 Creating Shapes, Stencils, and Templates

In this chapter, you will learn how to:

- ✔ Draw shapes from scratch.
- ✔ Group and merge shapes.
- ✔ Modify shapes.
- ✔ Save shapes on stencils.
- ✔ Create templates.

Even though Microsoft Office Visio includes tens of thousands of shapes, there might come a time when you need to create your own custom shapes. Perhaps you want to show special equipment or custom furniture in an office layout. Maybe you want to highlight your company's line of products in a client diagram. In any of these situations, you could create custom shapes to use in your diagrams.

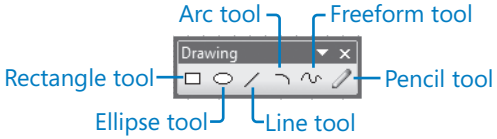
With the drawing tools in Visio, you can draw a shape from scratch or modify a shape that looks similar to the shape you want to create. If you want to use the shape in several diagrams, you can save it on a new or existing stencil, and then use it just like any other Visio shape. Putting your custom shapes on stencils also helps you organize and keep track of them, and you can share and send stencils through e-mail if you want to distribute your shapes to other Visio users. You can even go a step further and create your own templates to better suit the way you work.

In this chapter, you learn how to create shapes by drawing simple garden shapes that a gardening vendor at the Wide World Importers tradeshow can use in a presentation to demonstrate the basics of landscaping. You also learn how to save the shapes on a stencil and create a template.

Important Before you can use the practice files in this chapter, you need to install them from the book's companion CD to their default location. See "Using the Book's CD-ROM" on page xix for more information.

Drawing Shapes from Scratch

The sky is the limit when it comes to creating your own shapes. You can draw anything you want with the tools on the Drawing toolbar. To display this toolbar, click the Drawing Tools button on the Standard toolbar, or right-click the toolbar area, and click Drawing on the shortcut menu. To draw a shape, just click the toolbar button for the tool you want to use, position the pointer on the drawing page, and then drag to create lines, curves, arcs, circles, and so on.



Perhaps the most frequently used drawing tool is the Pencil tool, which you can use to draw both straight lines and arcs. As you begin to draw with the Pencil tool, Visio quickly calculates the path the mouse pointer is traveling and draws a line if the path is straight or an arc if the path curves.

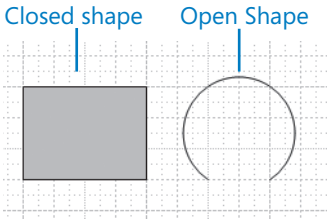
You can use the Line tool, Arc tool, and Freeform tool to draw different types of lines or arcs. In geometric terms, the Arc tool creates elliptical quarter-arc segments, whereas the Pencil tool draws circular arc segments. When you want to draw a continuous wavy line, you can use the Freeform tool. For example, you could use the Freeform tool to draw your signature.

> **Tip** In some types of technical illustrations, it's important to know that the Freeform tool creates a non-uniform rational B-spline (or NURBS for short).

With the Line, Arc, Freeform, and Pencil tools, you can create either 1-D or 2-D shapes. The Ellipse and Rectangle tools, on the other hand, create only 2-D shapes. With the Ellipse tool, you can create ovals and circles, whereas the Rectangle tool creates rectangles and squares. By holding down the Shift key while drawing with the Ellipse or Rectangle tool, you create circles and squares.

When you draw a shape, it can be either a ***closed shape*** or an ***open shape***. Shapes like rectangles or circles are closed shapes. You can fill the inside of closed shapes with colors and patterns. Lines, half-circles, or zigzag shapes are examples of open shapes. You can

format the ends with arrowheads, for example, or change the line color of open shapes, but you can't fill the inside of an open shape.



In this exercise, you use the drawing tools to create circles and ovals (closed shapes) that represent different types of perennial plants. Then you fill the inside of the shapes with color.

1. Start Visio. In the **Template Categories** list, click **General**. Under **All Templates**, double-click **Basic Diagram**.

   Visio opens a blank drawing page and three stencils.

Zoom

2. On the Standard toolbar, click the **Zoom** down arrow, and then click **100%** to zoom in on the drawing page.


Drawing Tools

3. On the Standard toolbar, click the **Drawing Tools** button to display the Drawing toolbar.

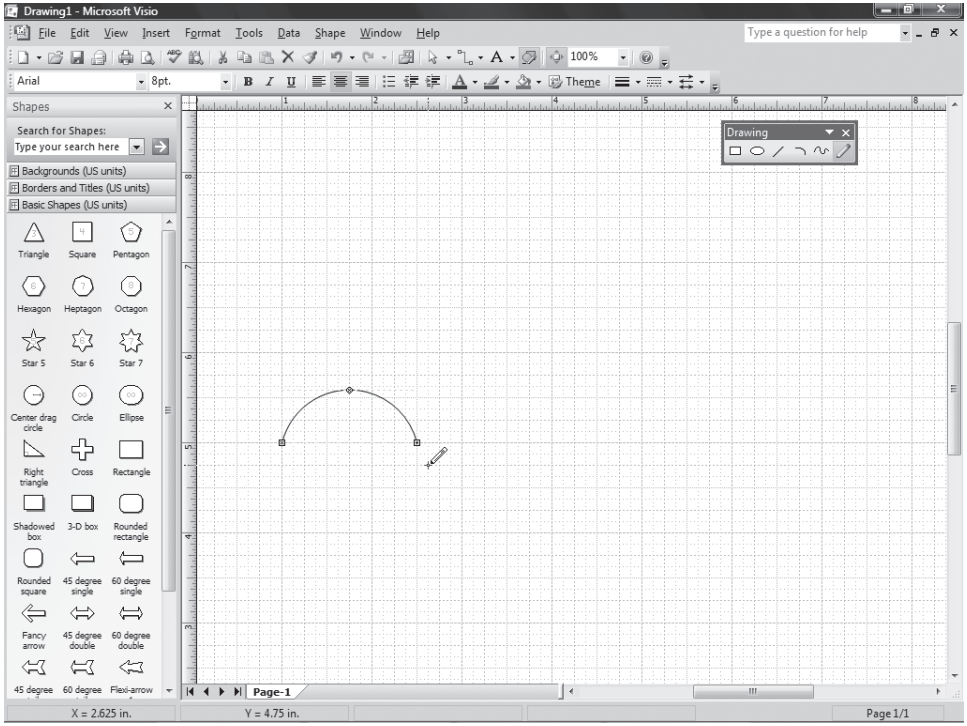
4. On the Drawing toolbar, click the **Pencil Tool** button.

   The pointer changes to a pencil with a blue crosshair.

5. On the drawing page, point to the location where you want to create the shape.

   The blue crosshair on the Pencil tool snaps to the grid to show you where the shape will start.

6. Drag in a curving motion from left to right to create an arc about 1.5 inches long, and then release the mouse button.



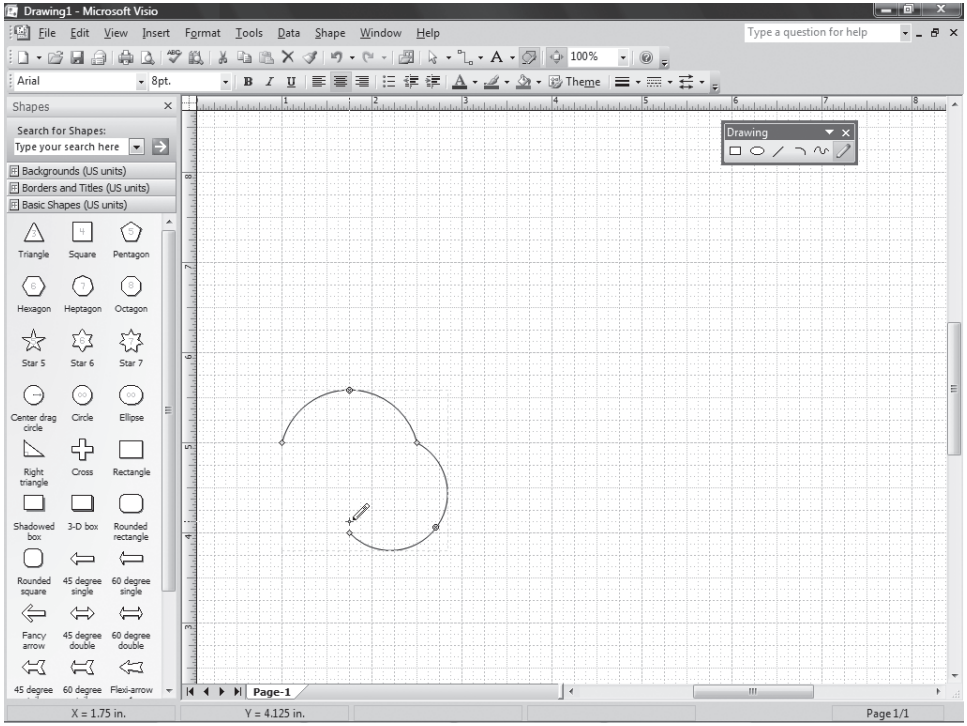

Arc Pointer


Line Pointer

Tip As you drag, the pointer displays a crosshair and an arc, which indicates that you're drawing an arc rather than a line. If a line pointer appears instead of an arc pointer while you are dragging with the Pencil tool, try exaggerating your movements with the mouse—that is, move the mouse in a very circular motion until the arc pointer appears.

7. Point to the right end point of the arc segment, and then drag in a downward, curving motion to draw another arc segment approximately 1 inch long, and then release the mouse button.

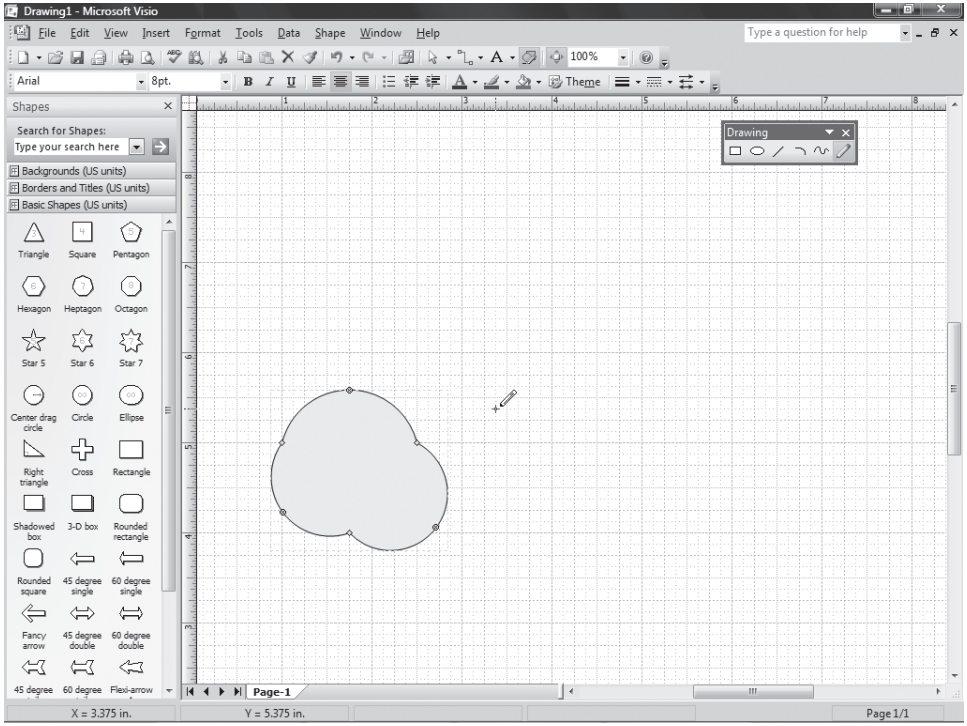
Visio creates a second arc segment connected to the first.



Troubleshooting Be careful not to *select* the right end point of the first segment. If you select the end point, it turns magenta. To deselect the end point, click the pasteboard or a blank area of the drawing page. If you drag a selected endpoint, Visio resizes the segment instead of starting a new one. If you accidentally resize a segment, press Ctrl + Z to undo the action, and then try again.

8. Point to the bottom end point of the second segment, drag another arc segment to the begin point of the first arc segment, and then release the mouse button.

Visio creates a closed shape and fills the shape with a gray color.



Troubleshooting If Visio doesn't fill the shape with a gray color, the shape isn't closed. Press Ctrl + Z three times to undo your last three actions, and start drawing the shape again. When you try again, make sure you start each new line segment right on the end point of the last arc segment. Make sure you end the arc segment right on the begin point of the first segment you drew to ensure you close the shape.

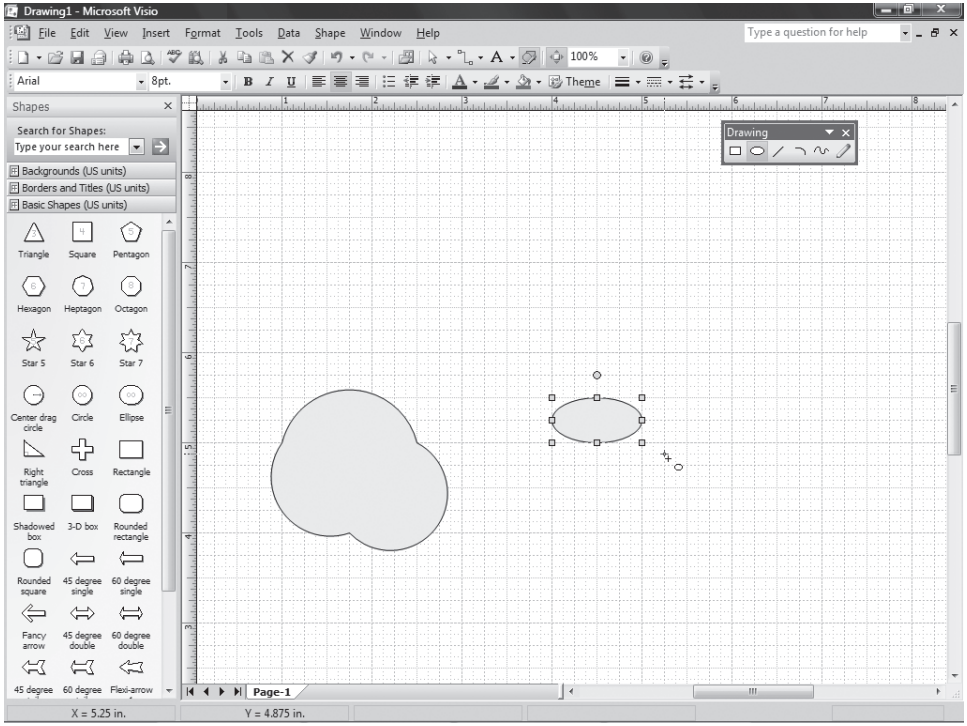

Ellipse Tool


Ellipse Pointer

9. On the Drawing toolbar, click the **Ellipse Tool** button.

The ellipse pointer appears.

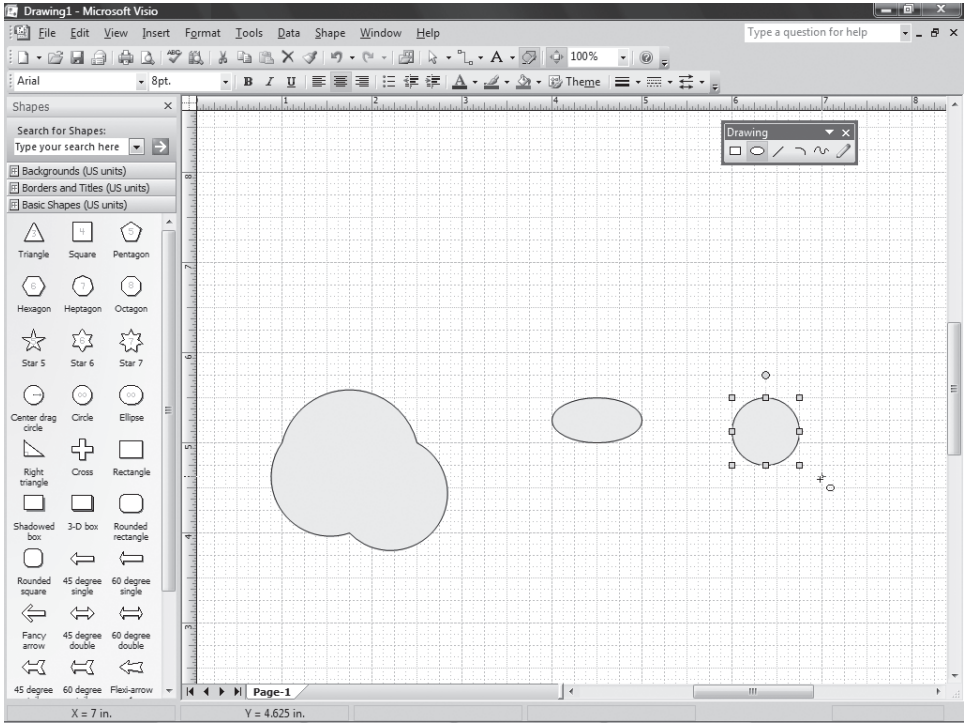
10. To the right of the shape you just drew, drag to create an ellipse approximately 1 inch wide and ½ inch tall.



11. Click the pasteboard to deselect the ellipse.

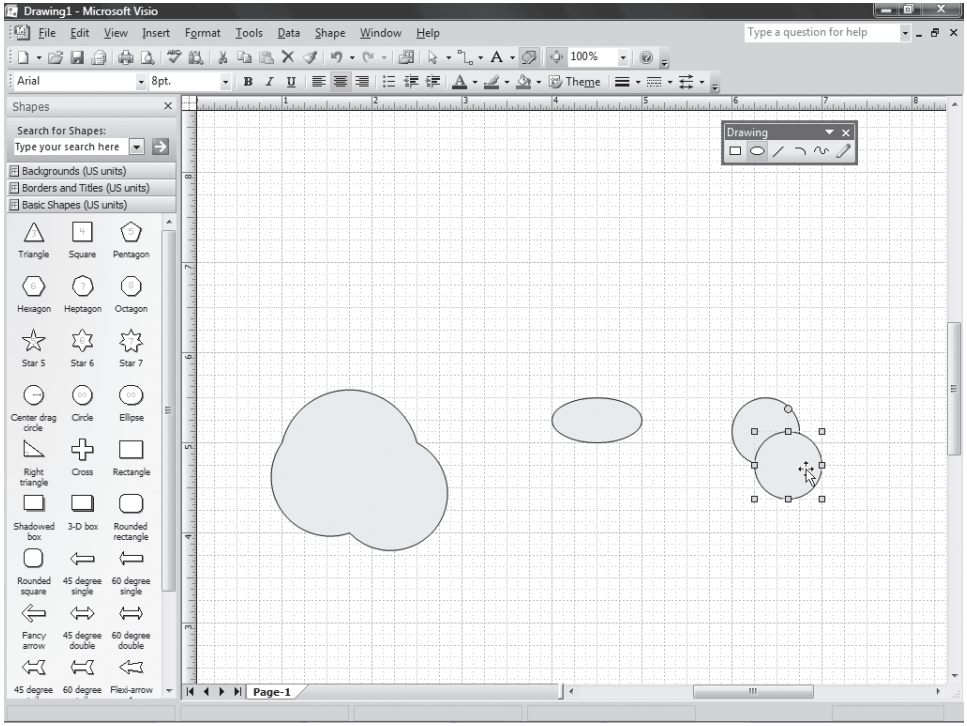
12. To the right of the ellipse you just drew, hold down the Shift key while you drag to create a circle approximately ¾ inch in diameter.

> **Tip** Watch the status bar as you drag to see the shape's dimensions.



13. Place the pointer over the circle, and then hold down the Ctrl key while you drag down and a bit to the right to create a copy of the circle. Drag downward until the copy of the circle only slightly overlaps the original circle.

The copy of the circle is selected.



Troubleshooting If you accidentally draw a new shape instead of copying the circle, press Ctrl + Z to undo the action, and then try again. Make sure you release the mouse button before the Ctrl key when you're done copying the shape. If you accidentally place the copy of the circle on the blue arrow that appears below the original circle, Visio connects the shapes. Press Ctrl + Z to undo the action, and then try again.


Fill Color

14. With the copy of the circle selected, on the Formatting toolbar, click the **Fill Color** down arrow to display the color palette.

15. Under **Standard Colors**, click the yellow color.

Visio fills the circle with the yellow color. The circle remains selected.

Tip You can position the pointer over a color on the color palette to see a ScreenTip that tells you the name of the color.

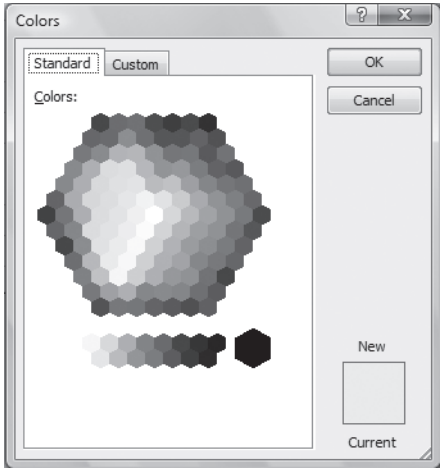
16. Click the other circle to select it.

Visio displays the shape's selection handles.

17. On the Formatting toolbar, click the **Fill Color** down arrow, and then click **More Fill Colors**.

    The Colors dialog box appears.

18. In the **Colors** dialog box, click the **Standard** tab to choose from standard colors.



19. Click a hexagon that shows a shade of pink, and then click **OK**.

    Visio closes the Color dialog box and fills the shape with the pink color. The circle remains selected.

20. Select the ellipse to the left of the circles, click the **Fill Color** down arrow, and then, under **Standard Colors**, click the light green color.

    Visio fills the ellipse with the light green color. The ellipse remains selected.

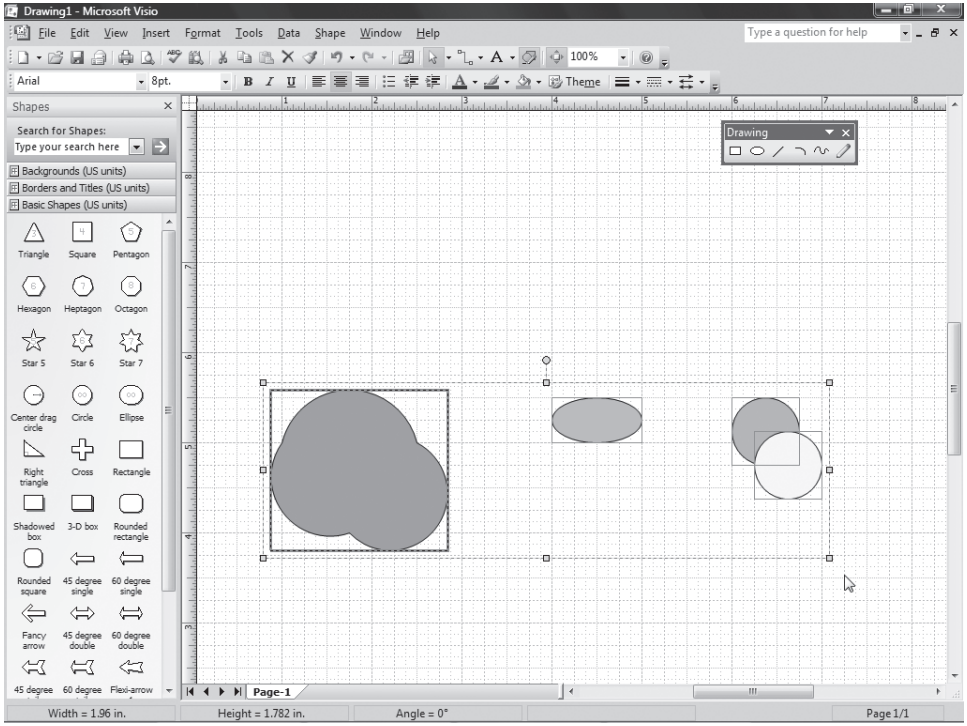
21. Select the first shape you drew, which is to the left of the ellipse, click the **Fill Color** down arrow, and then, under **Standard Colors**, click the light blue color.

    Visio fills the shape with the light blue color. The shape remains selected.


Pointer Tool

22. On the Standard toolbar, click the **Pointer Tool** button, and then drag a selection box around all four shapes.

    The shapes are selected.



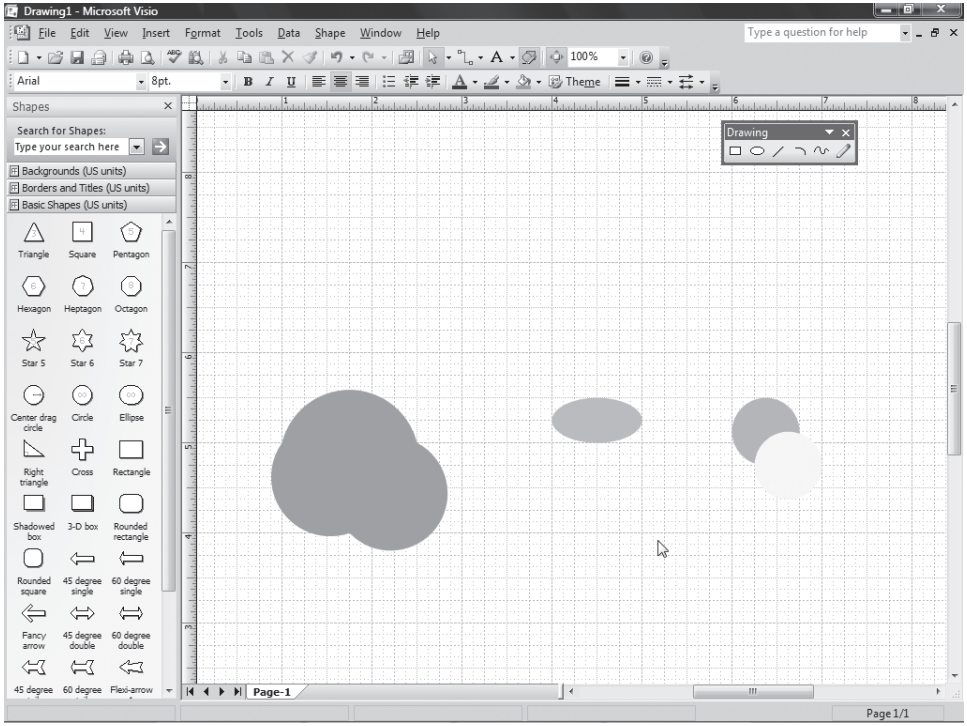

Line Color

23. On the Formatting toolbar, click the **Line Color** down arrow, and then click **No Line**.

Visio removes the black line border from the four shapes.

24. Press the Esc key to cancel the selection.

Your screen should look similar to the following.



25. On the **File** menu, click **Close**.

26. When Visio prompts you to save the drawing, click **No**.

Visio closes the drawing without saving the changes.

Grouping and Merging Shapes

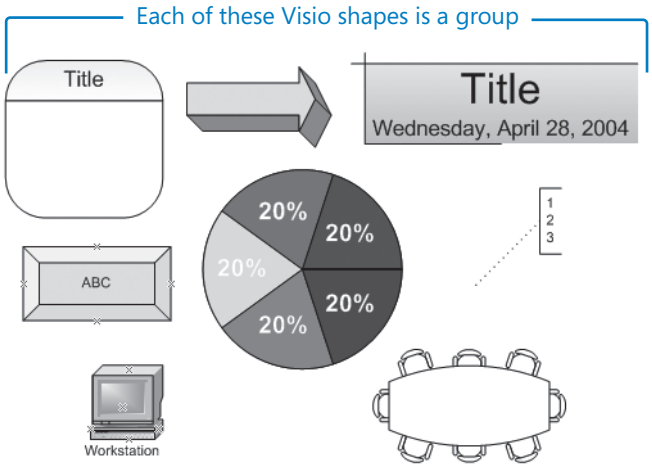
You can create a variety of simple shapes with the Visio drawing tools. However, you can also create complex shapes by grouping or merging two or more shapes:

- When you ***group*** two shapes, you create a third shape, the group, which contains all the original shapes and retains their formatting. You can still select and modify each of the individual shapes in the group. Use the Grouping commands on the Shape menu to create and work with groups.
- When you ***merge*** shapes, you combine or break up (depending on the command you use) the existing shapes to create new shapes. The original shapes are discarded. Use the Operations commands on the Shape menu to merge shapes.

> **Tip** If you want to preserve the original shapes when merging shapes, make a copy of the shapes before merging them with other shapes.

Grouping is a great way to work with several shapes as a unit instead of individually. For example, the conference table shapes used in office layouts are groups that include table and chair shapes. When you resize a conference table group, all the tables and chairs within the group are resized. Most of the title and border shapes on the Borders and Titles stencil are groups. When you move a title or border, all the shapes in the group move at once. To create a group, select the shapes you want to group, and then on the Shape menu, point to Grouping, and then click Group. The order in which you select the shapes doesn't matter.

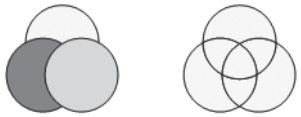
Each shape in a group can have unique formatting attributes; when you format one shape in a group, the rest of the shapes aren't affected. You work with the individual shapes in a group by subselecting them. To subselect a shape in a group, select the group, and then click the shape you want to work with individually. You can then format, resize, or even reshape the shape just as you would any other individual shape.



Tip You can change the behavior of groups and shapes within groups. For example, instead of resizing a shape within a group when the group is resized, you can reposition the shape instead of resizing it. To modify the settings for a group, select the group, and then on the Format menu, click Behavior. To modify the resize behavior for a shape within a group, subselect the shape, and then on the Format menu, click Behavior. You can also ungroup groups. To ungroup a group, on the Shape menu, point to Grouping, and then click Ungroup.

By contrast, merging shapes is a very different process. When you merge shapes, you create an entirely new shape; the original shapes are discarded. For example, you can merge two circles, one inside of the other, to create a single doughnut shape. Other op-

erations split shapes apart. The following table includes some of the merge commands that you can use to create new shapes and examples of what each command does.

Operation	What It Does	Example
Union	Creates a new shape from the perimeter of two or more overlapping shapes.	
Combine	Creates a new shape from selected shapes. If the selected shapes overlap, the area where they overlap is cut out, creating a cookie-cutter effect.	
Fragment	Breaks a shape into smaller parts, or creates new shapes from intersecting lines or from 2-D shapes that overlap.	
Intersect	Creates a new shape from the area where the selected shapes overlap and removes non-overlapping areas.	
Subtract	Creates a new shape by removing the area where selections overlap from the primary selection.	

Important When merging shapes, selection order is very important. The format of the first shape you select will be applied to the new shape. For example, if you select a red shape and a green shape, in that order, and then click Intersect, the new shape will be red. Selection order does not affect groups in the same way. Each shape retains its format when you create a group.

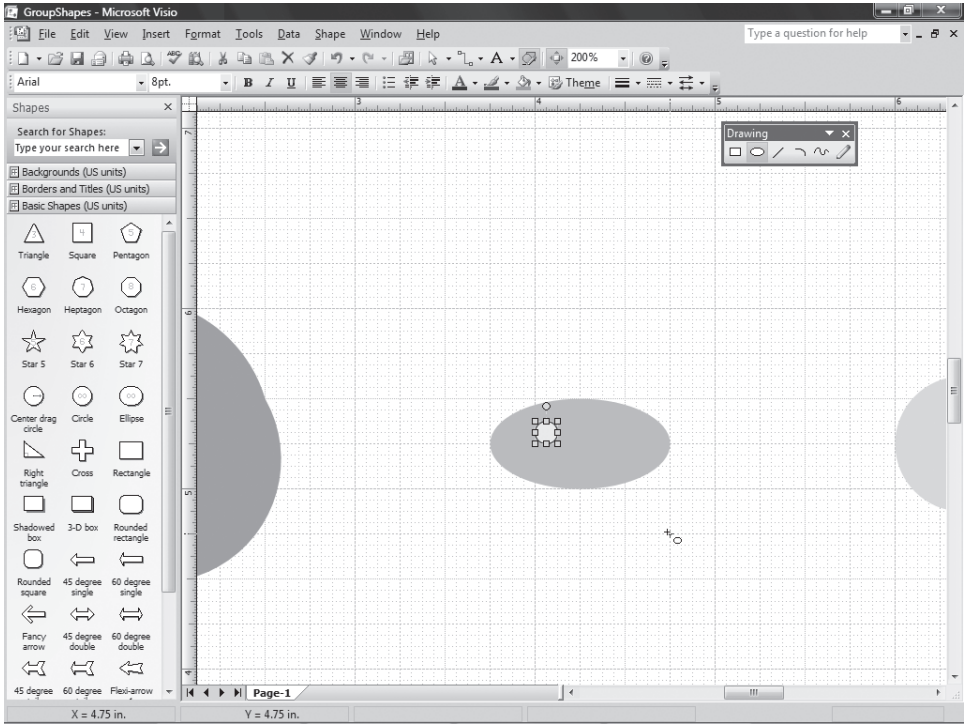
In this exercise, you group and merge simple shapes to create more complex shapes.

OPEN the *GroupShapes* file in Documents\Microsoft Press\Visio 2007 SBS\12_Create.


Ellipse Tool

1. On the Drawing toolbar, click the **Ellipse Tool** button.
2. Position the pointer over the green oval, hold down the Shift key, and drag to create a small circle approximately ¼ inch in diameter.

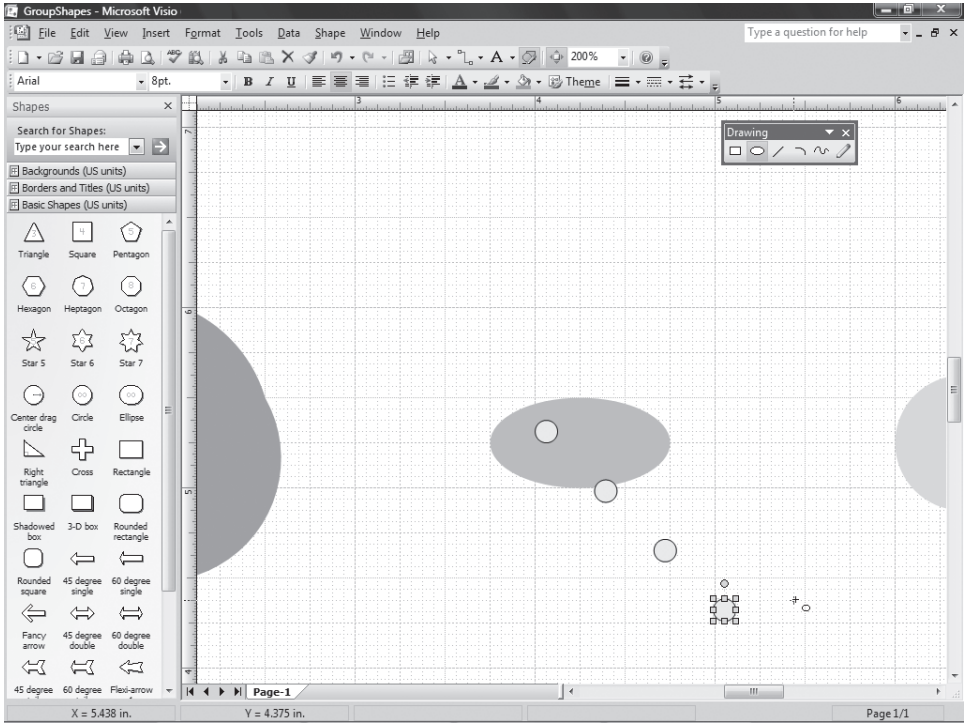
   The circle remains selected.



Tip You might need to zoom in to see the shapes better.

3. Press Ctrl + D three times to duplicate the circle three times.

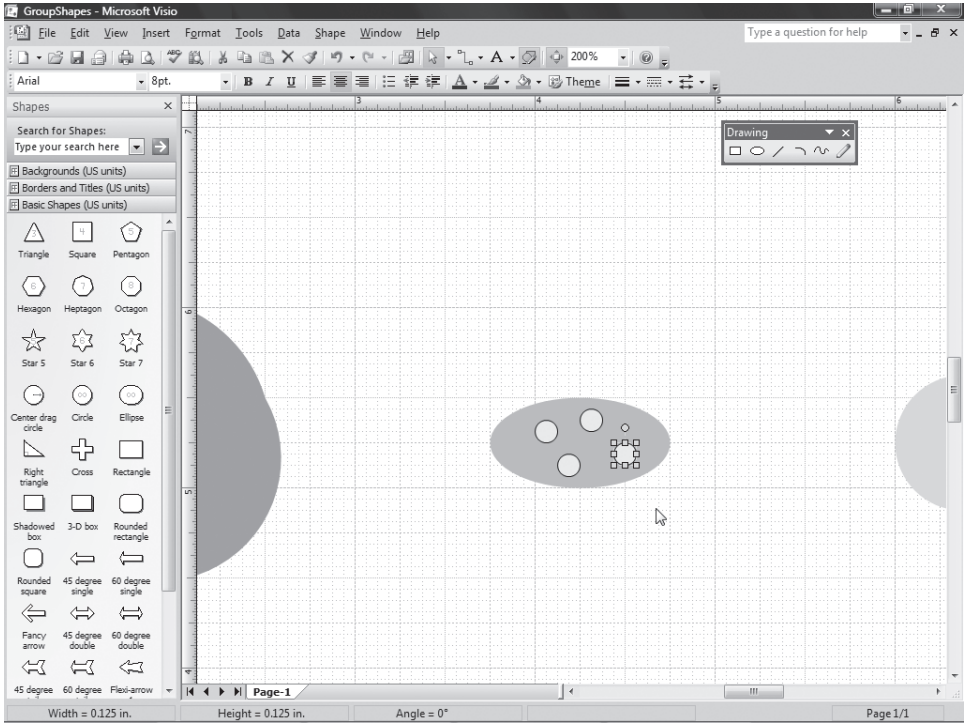
   Visio creates three new circles at even intervals, leaving the last circle selected.



Tip You can also duplicate shapes by clicking Duplicate on the Edit menu. Ctrl + D is the keyboard shortcut for the Duplicate command.


Pointer Tool

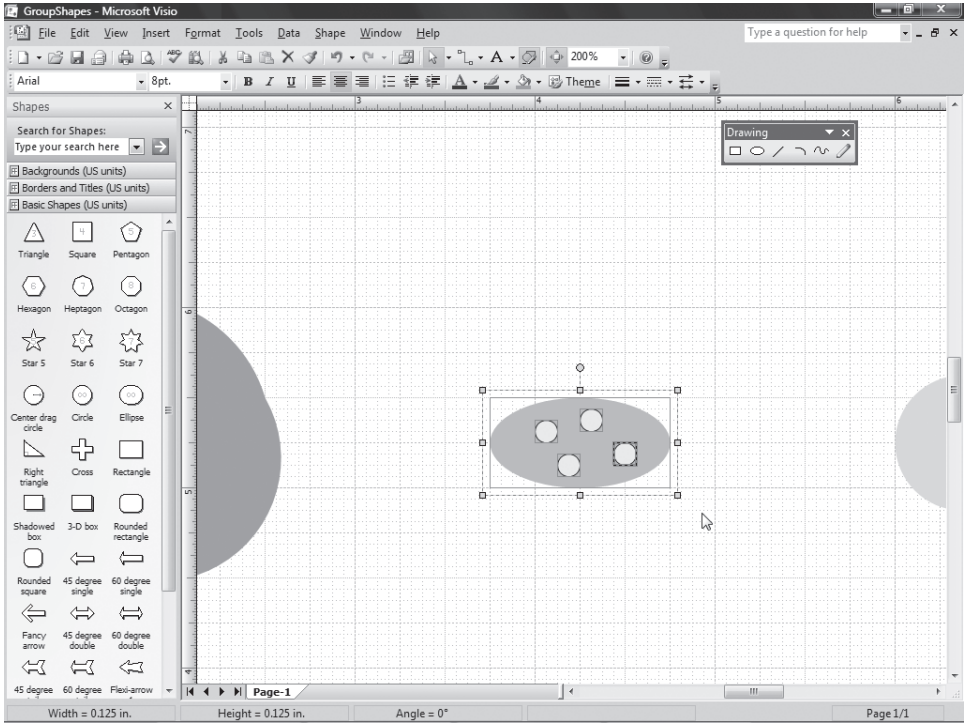
4. On the Standard toolbar, click the **Pointer Tool** button.
5. Drag each of the four small circles you just created on top of the green oval, arranging them like polka dots.



Troubleshooting If you resize a dot accidentally instead of moving it, press Ctrl + Z to undo the action, and then try again. It's often easier to move a small shape if you zoom in on the drawing page first.

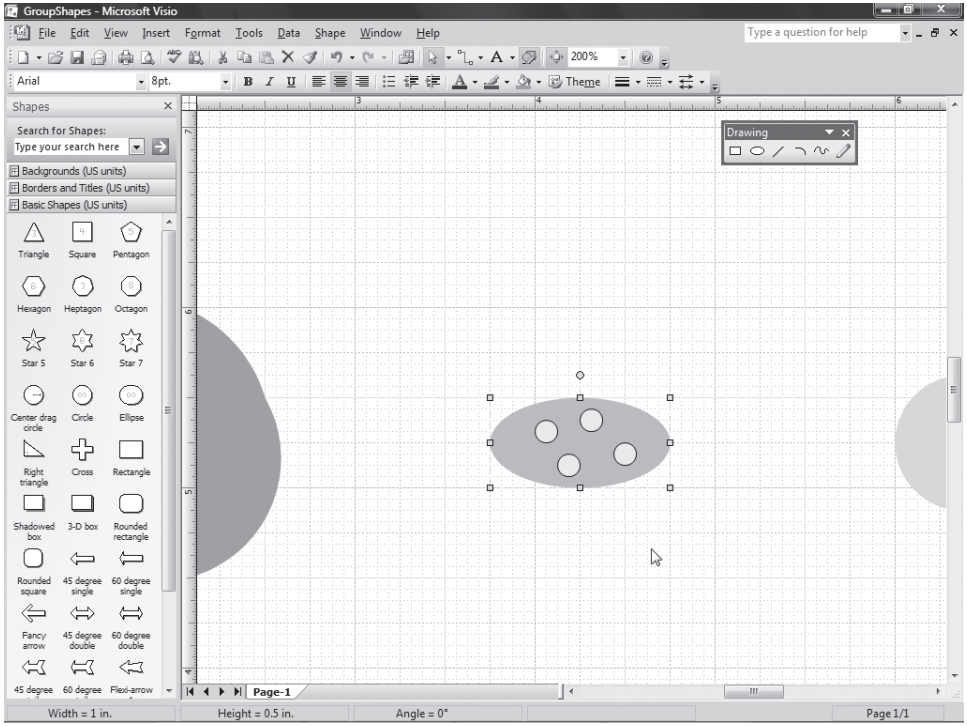
6. Drag a selection box around the green oval.

Visio selects the green oval and the four small circles—each shape is selected because they're individual shapes.



7. On the **Shape** menu, point to **Grouping**, and then click **Group**.

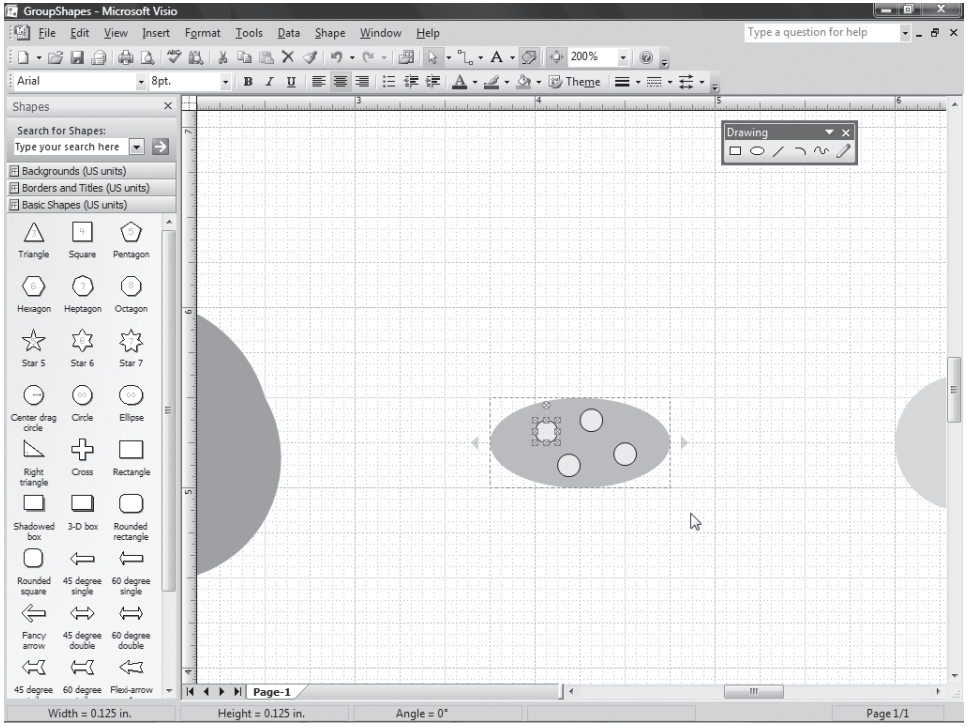
Visio creates a group and displays the group's selection handles—each individual shape is no longer selected because now they're part of a group.



Tip Alternatively, you can use the Shift + Ctrl + G keyboard shortcut to quickly group shapes. You can also ungroup a group. To do so, select the group, and then on the Shape menu, point to Grouping, and click Ungroup. If the Ungroup command is gray (unavailable), the selected shape isn't a group.

8. Click one of the dots in the group.

Visio subselects the dot and displays the shape's selection handles.




Fill Color

9. Click the **Fill Color** down arrow, and then, under **Standard Colors**, click the yellow color.

Visio fills only the selected dot with the yellow color.

10. Subselect the rest of the dots, one at a time, and then click the **Fill Color** button to fill each one with the same yellow color.

> **Tip** After you choose a color from the color palette, you don't need to open the color palette to apply that color to a shape. Just click the Fill Color button, which is loaded with the selected color.

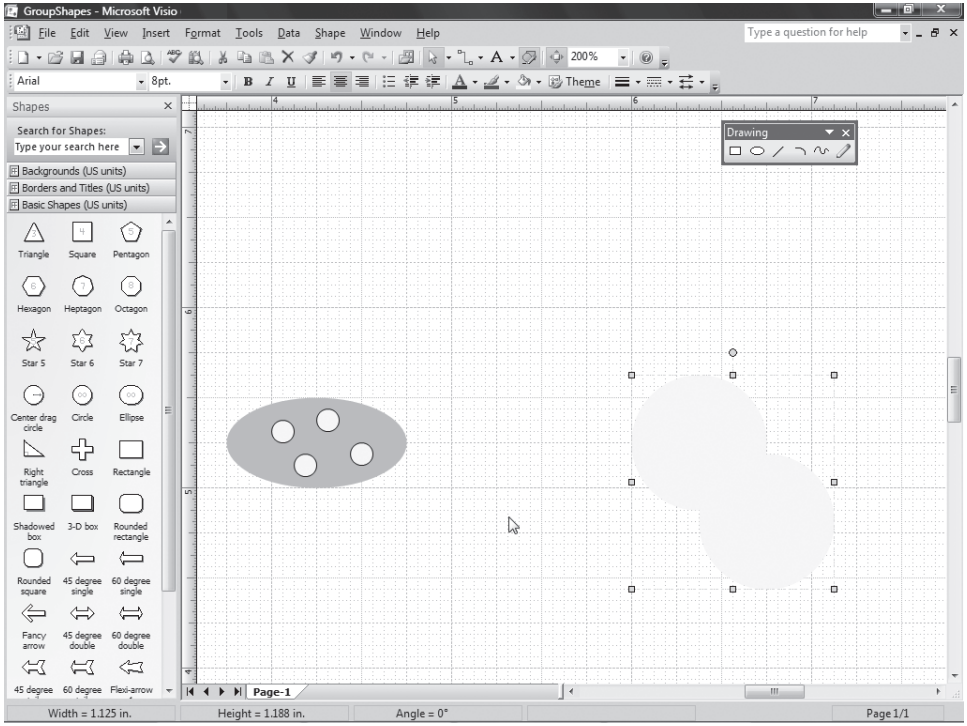
11. Click the large yellow circle to the right of the group.

12. Hold down the Shift key, and then click the pink circle.

Visio selects both circles.

13. On the **Shape** menu, point to **Operations**, and then click **Union**.

Visio unites the two circles to create a single new shape with the same formatting as the first circle you selected—the yellow circle.



14. Click the blue, irregular shape to select it.

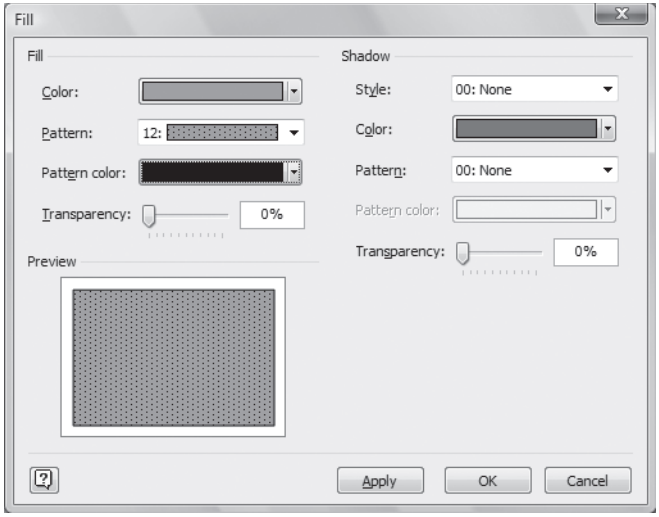
15. On the **Format** menu, click **Fill** to display the **Fill** dialog box.

16. In the **Fill** area, in the **Pattern** box, click the down arrow to display a list of patterns, and then click pattern **12**, which is a dotted pattern.

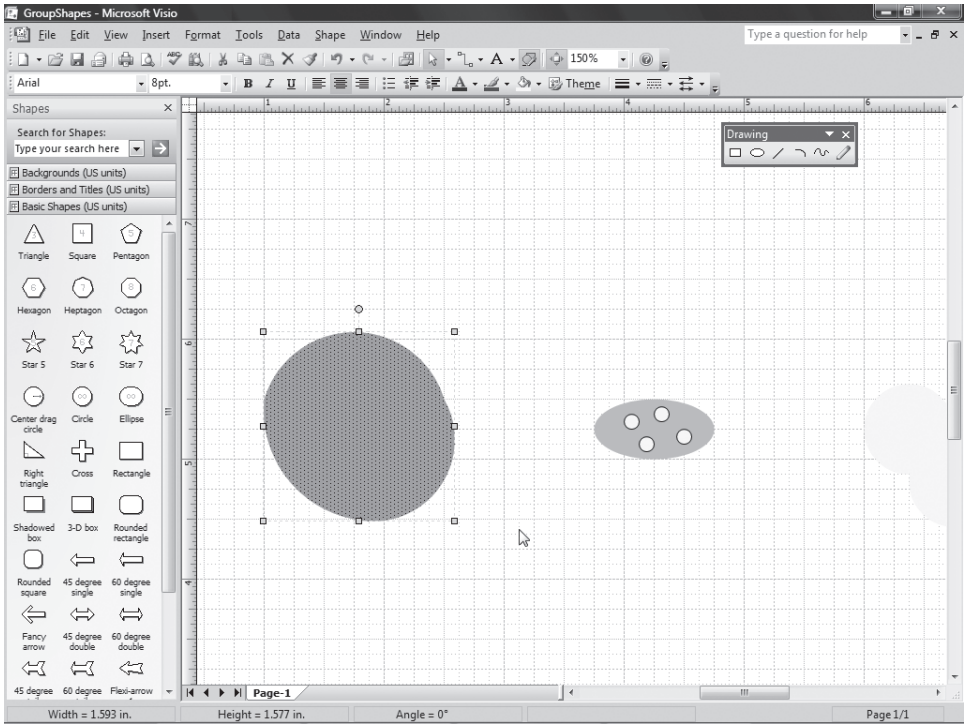
In the Preview area, notice white dots fill the blue shape.

17. In the **Pattern color** box, click the down arrow to display a list of pattern colors, and then, under **Theme Colors**, click the black color.

In the Preview area, notice the dots become black.



18. Click **OK** to close the **Fill** dialog box and apply the pattern to the shape.




Save

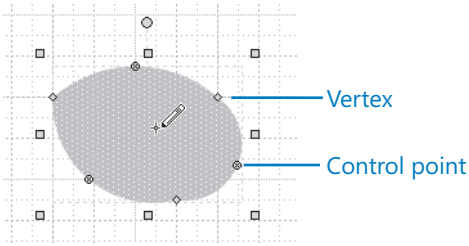
19. On the Standard toolbar, click the **Save** button to save the changes to the drawing.

CLOSE the *GroupShapes* file.

Modifying Shapes

The key to creating great-looking shapes is to draw a rough version of the shape first, and then refine it. There are special handles on lines and arcs that you can use to reshape, add, move, and delete line segments. For example, if you draw a crooked line with the Pencil tool, you can edit the line segment to straighten it out and even change it to an arc. A diamond-shaped ***vertex*** appears where line segments are joined when you select a shape with the Pencil tool. You can delete, move, or add vertexes to reshape a shape with the Pencil tool.

A circular ***control point*** also appears on line segments selected with the Pencil tool. You can use a control point to change the curvature of a segment. When you move the control point down on a rolling hill shape, it becomes a sunken valley, and so on. Even if you can't draw a straight line, you can straighten a crooked line by editing the shape's vertices and control points.



> **Tip** Some Visio shapes are locked to prevent changes. If a shape is locked, its selection box is gray instead of green.

In this exercise, you use the Pencil tool to edit line and arc segments to refine the appearance of a shape.

OPEN the *ModifyShapes* file in Documents\Microsoft Press\Visio 2007 SBS\12_Create.

Zoom


Pencil Tool

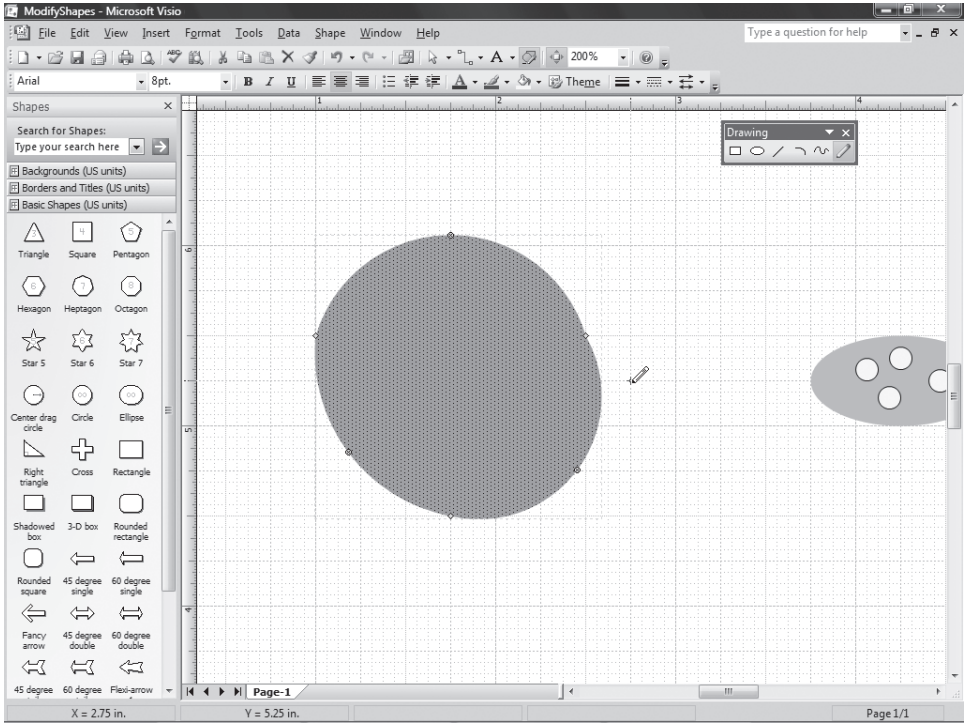
1. On the Standard toolbar, click the **Zoom** down arrow, and then click **200%**.

   Visio zooms in to 200% on the drawing page.

2. On the Drawing toolbar, click the **Pencil Tool** button.

3. Click the blue shape with the black, dotted fill pattern to select it.

   Visio display the shape's vertices and control points, and a selection box appears around the shape.

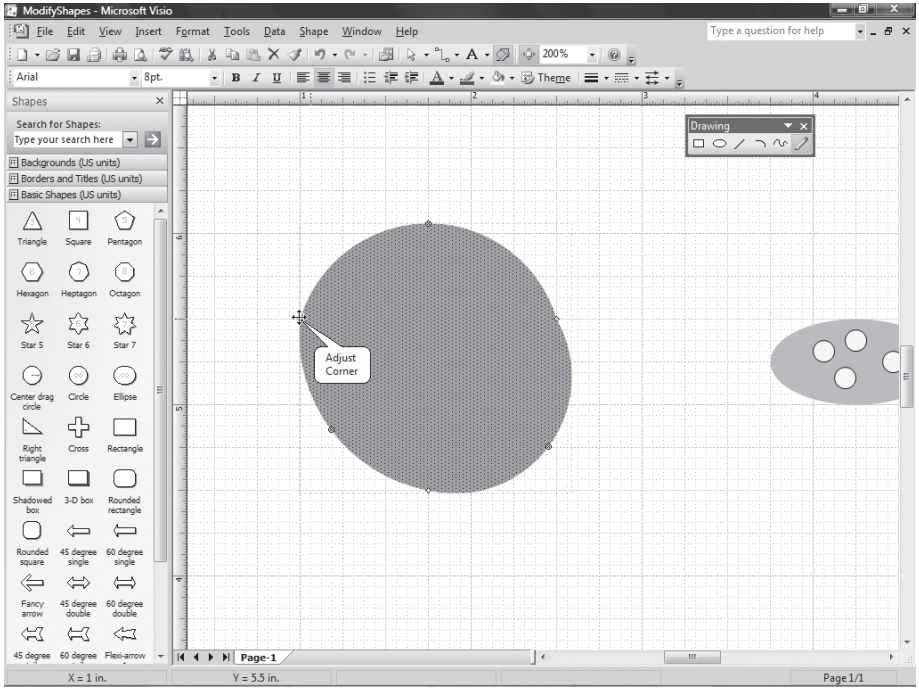


Tip In addition to moving and resizing shapes, you can use the Pointer tool to modify custom shapes. Select a shape you drew, position the pointer over the shape, and the shape's vertices and control points appear within the shape's selection box. Then drag a vertex or control point to move it. You can also drag a selection handle on the selection box to resize the shape.

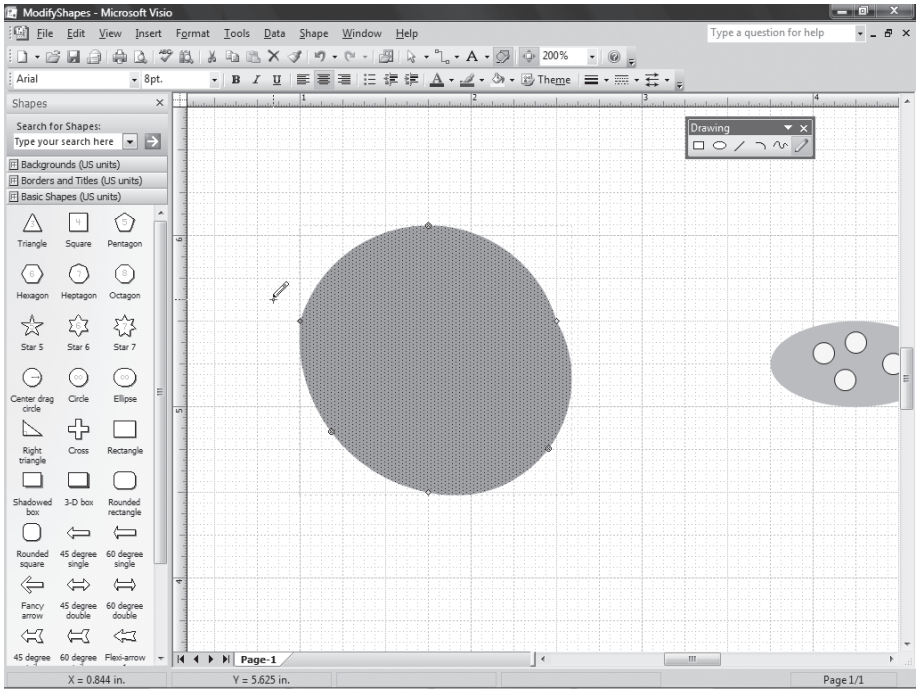
4. Point to the leftmost vertex.


Four-Headed Arrow

The pointer changes to a four-headed arrow and a ScreenTip for the vertex appears.

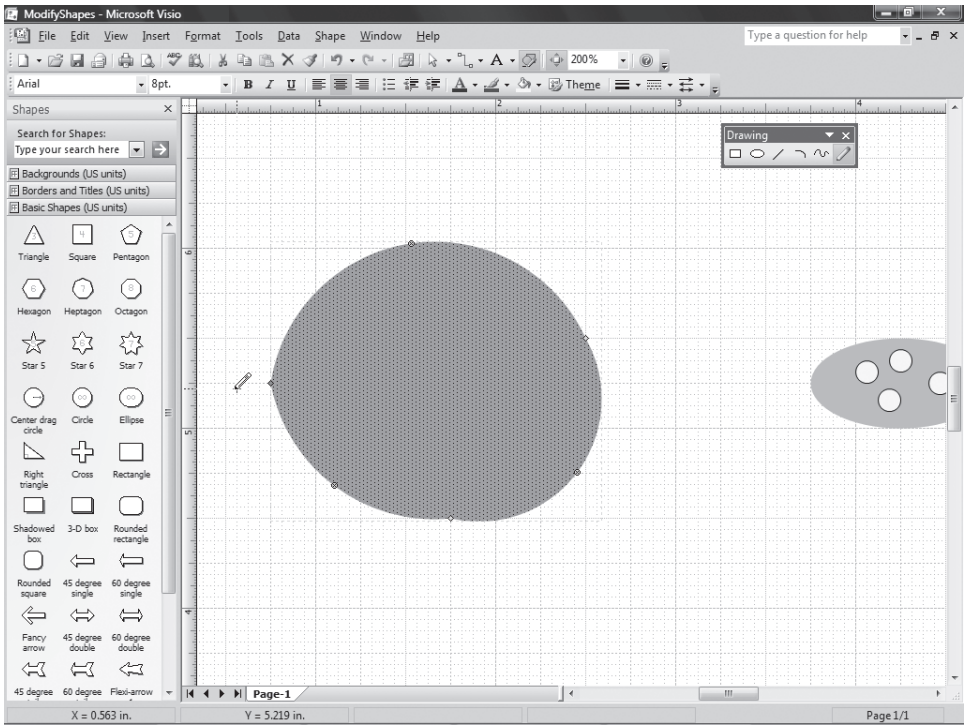


5. Click the vertex. The vertex turns magenta.



6. Drag the vertex down and to the left approximately ¼ inch.

   Visio redraws the shape.

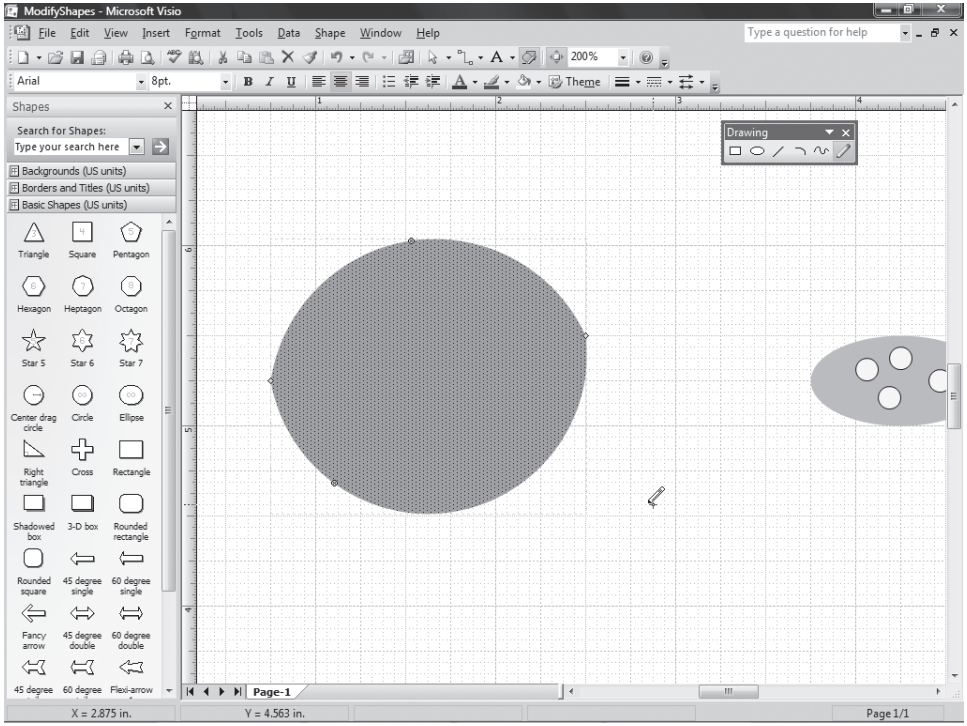


7. Click the bottom vertex to select it.

   The vertex turns magenta.

8. Press the Del key.

   Visio removes the vertex and redraws the shape.

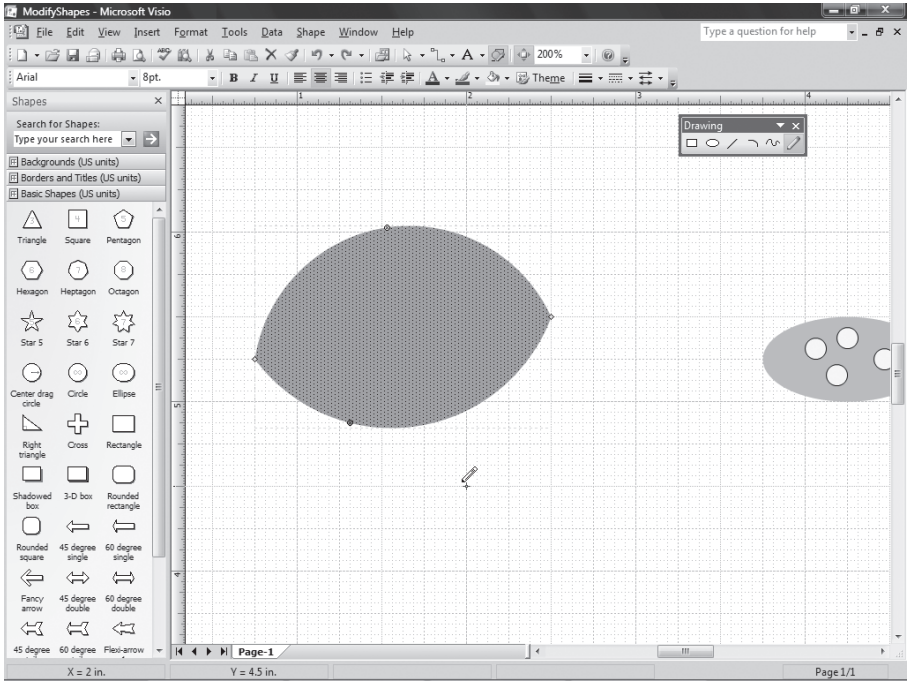


9. Click the bottom, left control point to select it.

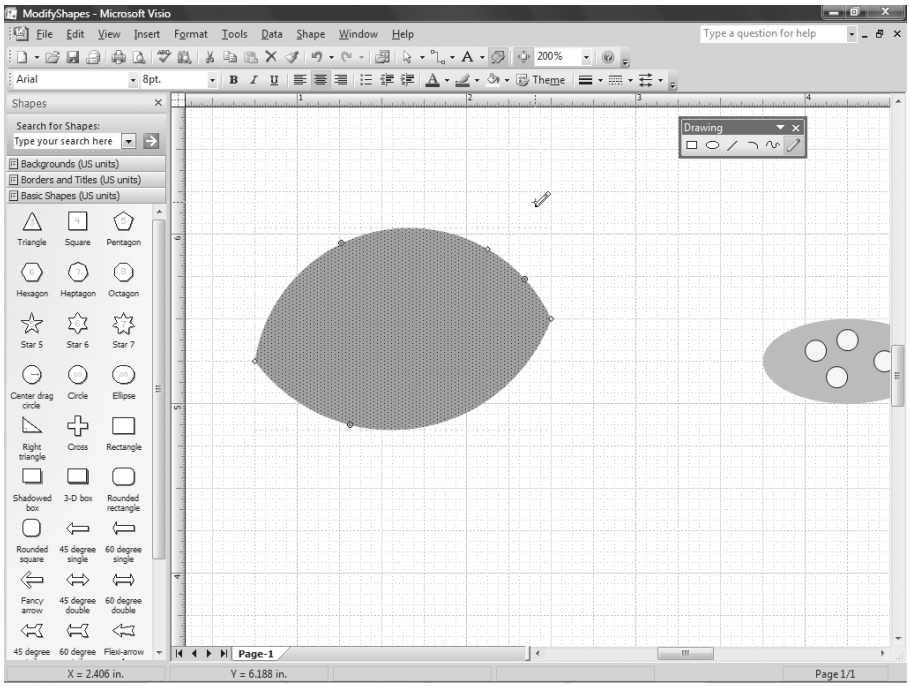
The control point turns magenta.

10. Drag the control point up and to the right.

Visio changes the curvature of the arc segment.

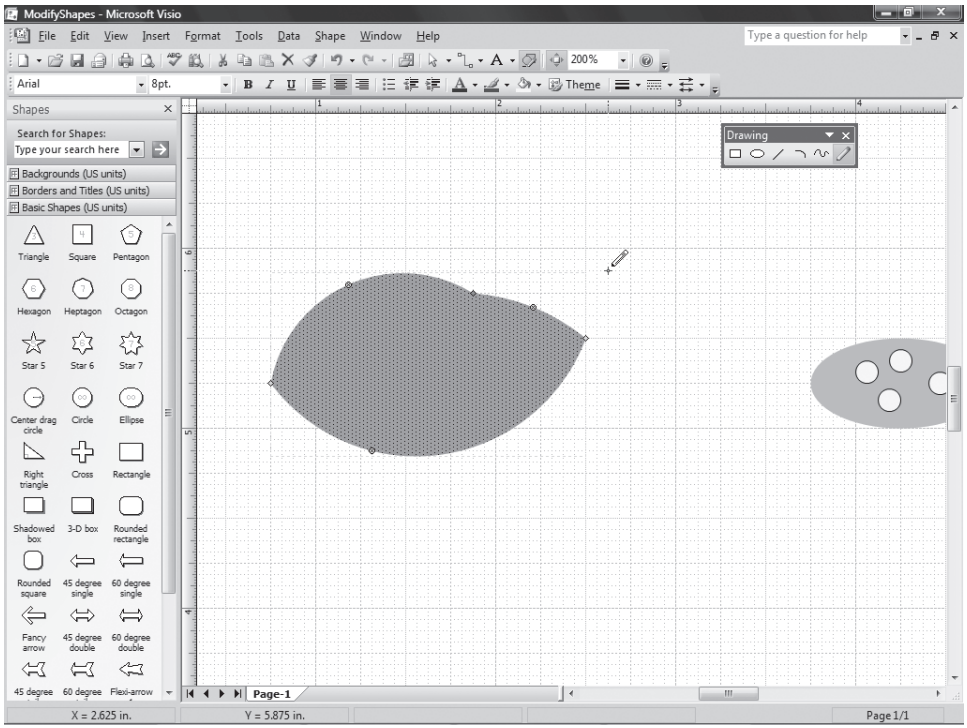


11. Hold down the Ctrl key as you click anywhere on the top edge of the shape. Visio adds a vertex.



12. Drag the new vertex down and to the left approximately ¼ inch.

Visio redraws the shape.



[B10VI19]
Save


Save

13. On the Standard toolbar, click the **Save** button to save the changes to the drawing.

CLOSE the *ModifyShapes* file.

Saving Shapes on Stencils

Once in a while you might create a custom shape that you'll use only once. However, more often than not, you'll want to use your custom shapes again and again. Just as you can drag a shape from a stencil onto the drawing page to create a diagram, you can drag a custom shape from the drawing page onto a custom stencil to store it there. For example, if you customized a Visio title shape for your company's logo, you could drag it onto a custom stencil or the Favorites stencil so you could easily access it while creating any diagram. Likewise, if you use the same shapes from several different stencils over and

over and you'd like to consolidate them onto a single stencil, you can add those shapes to a custom stencil or the Favorites stencil.

Tip You can't modify or add shapes to Visio stencils. You must create your own stencils, and then add shapes to them. You can, however, add shapes to the Favorites stencil. To open the Favorites stencil, click the Shapes button on the Standard toolbar, point to My Shapes, and then click Favorites. To add custom shapes to the stencil, drag them from the drawing page onto the stencil. When you drag the first shape onto the stencil, Visio asks you if you'd like to edit the stencil; click Yes. To quickly add Visio shapes to the Favorites stencil, right-click a Visio shape on a stencil, point to Add to My Shapes, and then click Favorites.

Saving your custom shapes on custom stencils also makes it easy to distribute your shapes to other Visio users. When you create a new stencil, Visio saves it on your computer only. However, you can share a stencil just as you share drawing files by saving the stencil in a network folder that others have access to, or by sending the stencil in an e-mail message to your colleagues.

Tip Stencils are files like Visio drawings files and templates. Stencils have a *.vss* file extension, which stands for *Visio stencil*. If someone sends a stencil to you, you can put it in the My Shapes folder in your Documents folder for easy access. Then just open a Visio drawing file or template, click the Shapes button on the Standard toolbar, point to My Shapes, and click the name of the stencil to open it.

Stencils open, by default, as ***read-only***—that is, a stencil can't be changed unless you specifically open it for editing. When you drag a shape onto a read-only stencil, Visio prompts you to open the stencil for editing so it can add the shape to the stencil. You can also click the stencil icon on the stencil, click Edit Stencil, and then drag the shape onto the stencil. When the stencil becomes editable, a red asterisk appears on the stencil icon on the title bar. When you create a new stencil, Visio opens the new stencil, by default, as an editable stencil; however, after you close it, it becomes read-only.

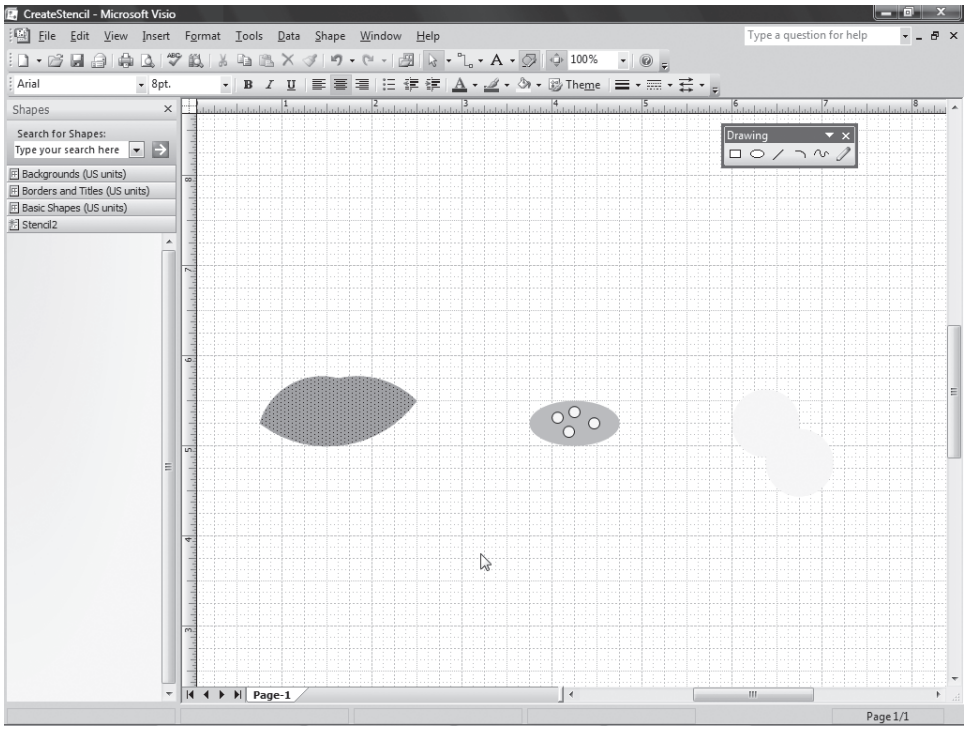
Shapes on stencils are represented by their corresponding icons and names. When you drag a new shape onto a stencil, Visio creates a shape icon and applies a default name (*Master.1*, for example). You can easily change the name to something more descriptive by double-clicking the default name and typing a new name.

In this exercise, you create a custom stencil, and then drag custom shapes onto it.

OPEN the *CreateStencil* file in Documents\Microsoft Press\Visio 2007 SBS\12_Create.

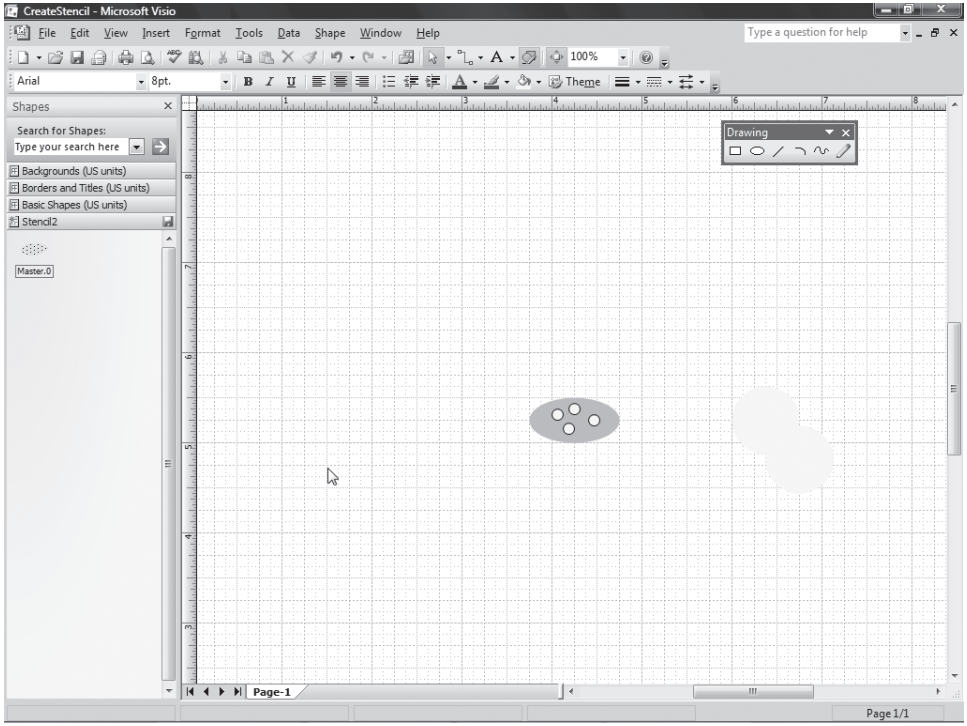
1. On the **File** menu, point to **Shapes**, and then click **New Stencil**.

   Visio opens a new stencil (named *Stencil* followed by a number) and docks it alongside the drawing page in the Shapes window. Notice the red asterisk that appears on the stencil icon in the stencil's title bar—this indicates that you can edit the stencil.



2. Drag the blue shape onto the stencil.

   Visio creates a new shape (called *Master.0*) with an icon that looks like the shape and removes the blue shape from the drawing page.



Tip When you drag shapes from the drawing page onto a stencil, the shapes are deleted from the drawing page. If you want to retain the original shapes on the drawing page and drag a copy of them onto the stencil instead, hold down the Ctrl key while you drag the shapes onto the stencil. Make sure you release the mouse button before you release the Ctrl key when using this copying method.

3. Drag the green oval group onto the stencil window.

Visio creates a new shape (called *Master.1*) with an icon that looks similar to the shape and removes the green shape from the drawing page.

Tip When creating icons for shapes on stencils, Visio uses only 16 colors, by default. If you create a shape that isn't formatted with one of those 16 colors, Visio substitutes the closest color when it creates the stencil icon. Visio does this to save disk space—an important consideration when dealing with a lot of stencils. That's why an icon for a shape might not exactly represent the shape. However, when you drag the shape onto the drawing page, it appears just the way you designed it. To edit the icon for a custom shape, right-click the shape on the stencil, point to Edit Master, and then click Edit Icon Image.

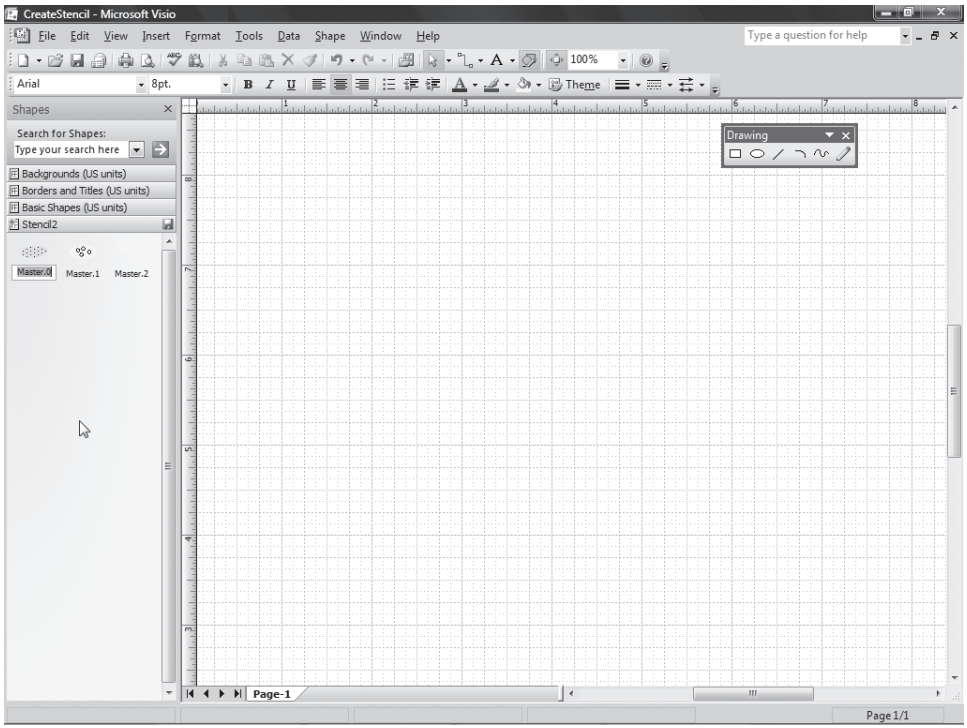
4. Drag the yellow shape onto the stencil window.

Visio creates a new shape (called *Master.2*) with an icon that looks similar to the shape and removes the yellow shape from the drawing page.

> **Tip** You can also save shapes on the Favorites stencil. To open the Favorites stencil, on the File menu, point to Shapes, point to My Shapes, and then click Favorites. Before you can add shapes to the Favorites stencil, you must make it editable by clicking the stencil icon, and then clicking Edit Stencil.

5. Right-click **Master.0**, and then click **Rename Master** on the shortcut menu.

   The name, *Master.0*, is highlighted so typing the new name replaces the old name.



6. Type **Thymus vulgaris,** and press the Enter key.

   Visio changes the name of the shape to *Thymus vulgaris*.

7. Right-click **Master.1**, and then click **Rename Master** on the shortcut menu.

8. Type **Rudbeckia hirta,** and then press the Enter key.

   Visio changes the name of the shape to *Rudbeckia hirta*.

9. Double-click the shape icon name, **Master.2**.

   Visio highlights the shape name.

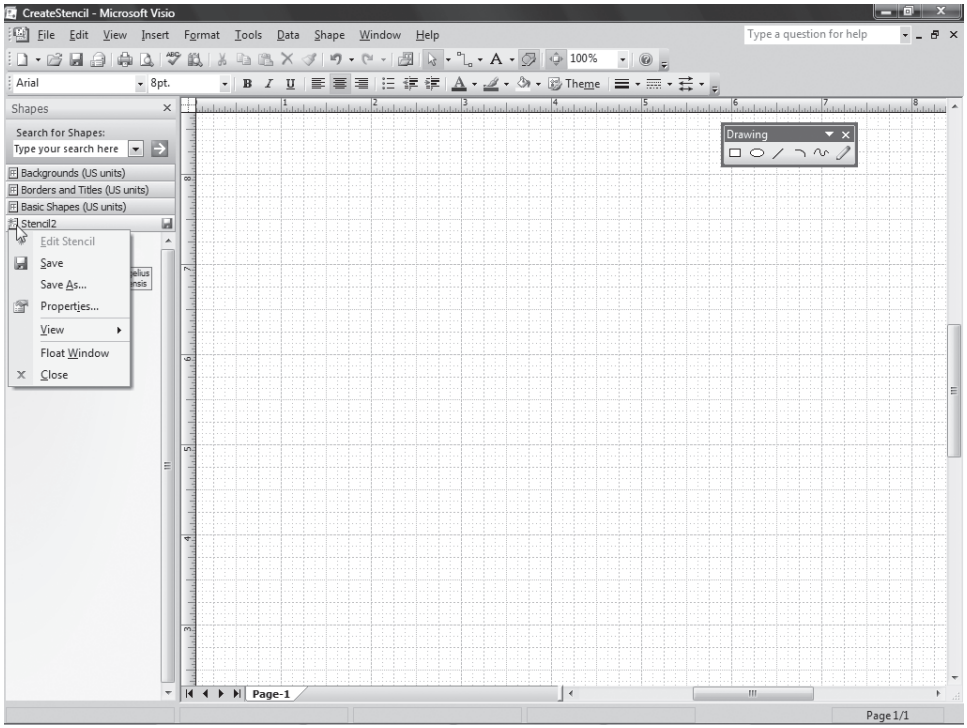
Troubleshooting Make sure you double-click the *text* for the shape icon and not the shape icon itself. If you double-click the shape icon, Visio opens a shape-editing window instead of selecting the shape icon name. To close the shape-editing window, click the blue stencil icon in the upper-left corner of the shape-editing window, and then click Close on the shortcut menu that appears.

10. Type Phygelius capensis, and then press the Enter key.

Visio changes the name of the shape to *Phygelius capensis*.

11. On the **Stencil1** title bar, click the green stencil icon with the red asterisk.

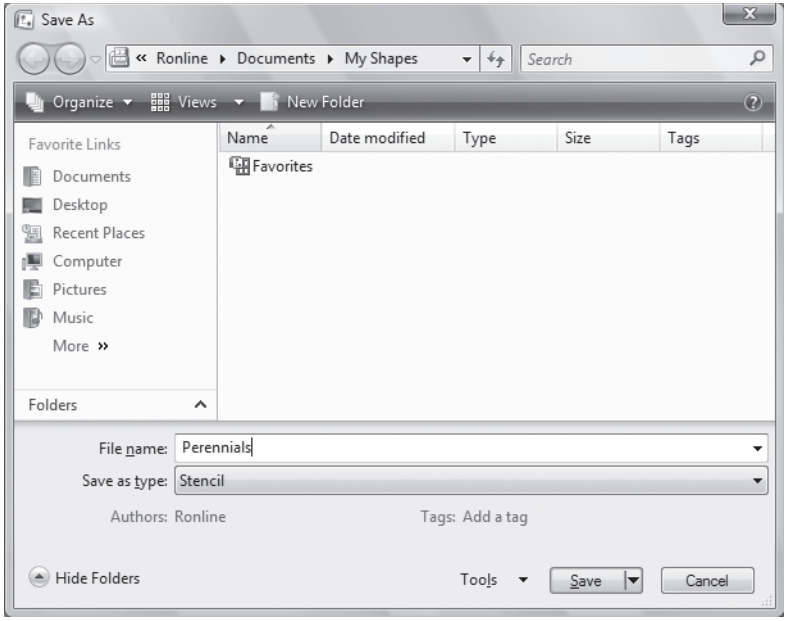
Visio displays a menu of commands for working with the stencil.



12. Click **Save**.

The Save As dialog box appears.

13. In the **File name** box, type Perennials.



Tip Notice the default file format in the Save as type box is *Stencil (*.vss)*. The file extension stands for *Visio stencil*.

14. Click **Save**.

    Visio saves the stencil in the My Shapes folder by default, so the new stencil name, *Perennials*, will appear on the My Shapes submenu.

15. From the **Perennials** stencil, drag the **Rudbeckia hirta** shape onto the drawing page.

16. From the **Perennials** stencil, drag the other two shapes—one at a time—onto the drawing page.

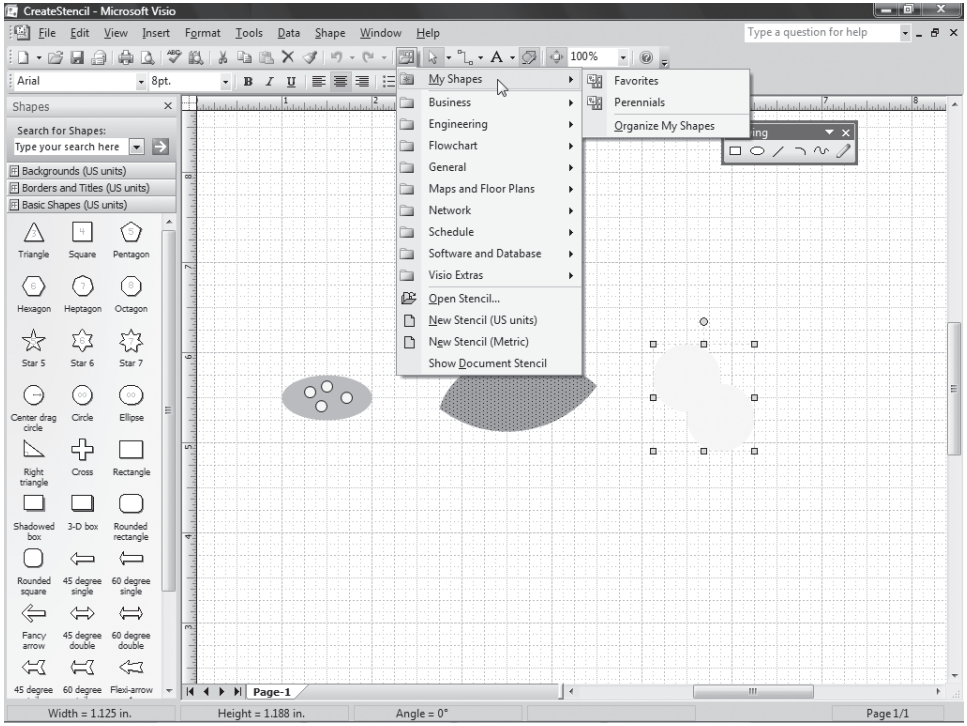
17. On the **Perennials** title bar, click the green stencil icon, and then click **Close**.

    Visio closes the stencil.


Shapes

18. On the Standard toolbar, click the **Shapes** button, and then point to **My Shapes**.

    The Perennials stencil appears on the My Shapes submenu.



Troubleshooting If the Perennials stencil doesn't appear on the My Shapes submenu, you didn't save it in the My Shapes folder, which is where Visio looks for all stencils by default. To open a stencil in a different location, on the File menu, point to Shapes, and then click Open Stencil.

19. Click **Perennials**.

Visio opens the Perennials stencil and docks it to the left of the drawing page in the Shapes window.

Tip When you open the stencil, notice that there is no red asterisk on the stencil icon, which means the stencil is read-only. To make a stencil editable, click the stencil icon, and then click Edit Stencil on the shortcut menu. To make the stencil read-only again, click the Edit Stencil command again.

20. On the **File** menu, click **Close**.

Visio prompts you to save changes to the drawing.

21. Click **No**.

Visio closes the drawing and stencils.

Creating Templates

If you frequently create a particular type of diagram that uses a unique page size or drawing scale, includes a specified number of pages, or always contains the same information, such as a corporate logo or a title bar containing file information, consider creating a custom template. For example, if you create landscape plans frequently, you can create a template that opens the drawing page at an appropriate size, opens stencils containing landscaping shapes, and includes the appropriate title and logo for your company.

You can save any of your diagrams or drawings as a Visio template, or you can revise an existing Visio template and save it with a different file name as a custom template. Then you can open your custom template to start a new diagram. For example, perhaps you always use the same four stencils, but none of the Visio templates open all four of those stencils. Every time you create a diagram, you have to go through the same tedious procedure of opening the same four stencils before you start drawing anything. Instead, you can open the four stencils for the last time, and before you draw anything, save the blank diagram as a custom template. From then on, you only need to open your custom template, and you're ready to create a diagram with shapes from those stencils.

Tip Visio templates have a *.vst* file extension, which stands for *Visio template*.

In addition to stencils, templates can also include the following:

- One or more drawing pages, including background pages. Each page can contain shapes, pictures, and other objects.
- Print settings that you enter in the Print Setup dialog box, such as landscape-oriented pages, a custom size, or a drawing scale.
- Theme effects and colors for lines, text, and fills.
- Snap and glue options that you specify in the Snap & Glue dialog box.
- A color palette from the Color Palette dialog box.
- Window sizes and positions.

In effect, you can save all the settings you work with most often as a template so that you don't have to set them each time you start a new diagram.

In this exercise, you open a Visio template, and then revise it to create your own custom template. You change the drawing page orientation for the template, open custom stencils, and then save the file as a template.

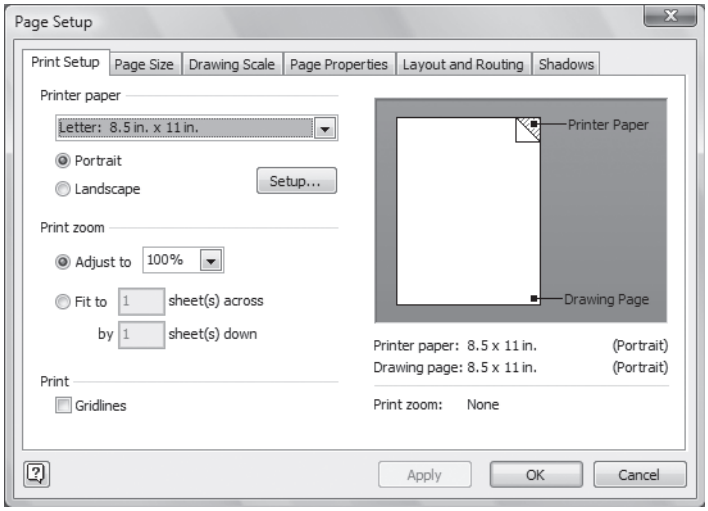
USE the *Garden Perennials* file in Documents\Microsoft Press\Visio 2007 SBS\12_Create for this exercise.

1. On the **File** menu, point to **New**, point to **General**, and then click **Basic Diagram**.

   Visio opens a blank drawing page and three stencils.

2. On the **File** menu, click **Page Setup**.

   The Page Setup dialog box appears and displays the Print Setup tab.



3. Click the **Page Size** tab. In the **Page size** area, select the **Pre-defined size** option, and then under **Page orientation**, click **Landscape**.

   Visio updates the preview in the dialog box to show a landscape-oriented drawing page.

4. To close the **Page Setup** dialog box, click **OK**.

   Visio changes the drawing page orientation so that the page is wider than tall.


Shapes

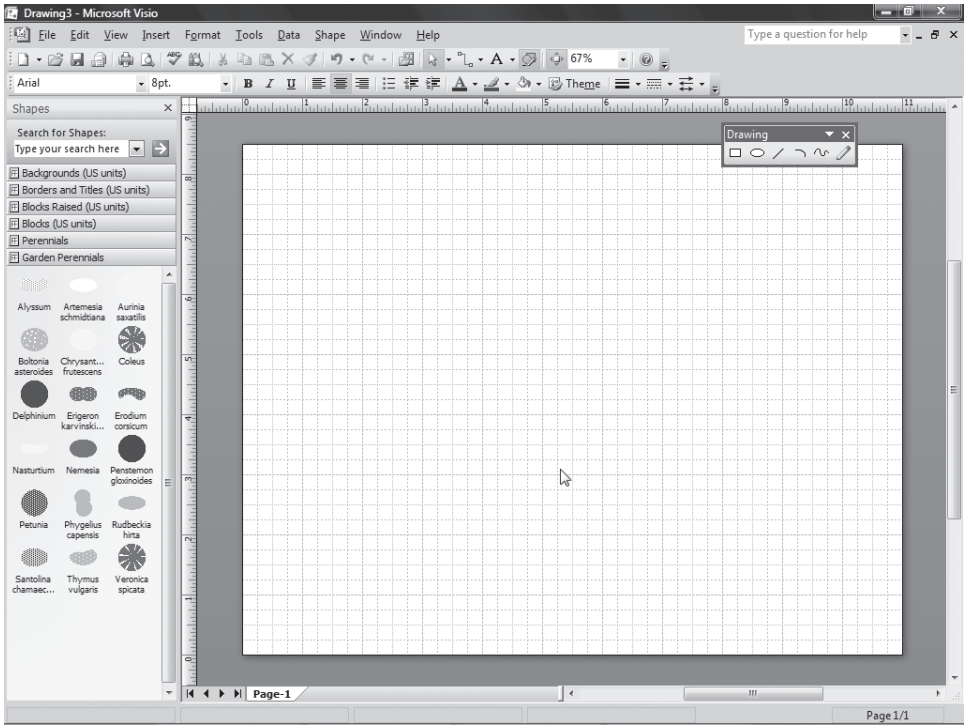
5. On the Standard toolbar, click the **Shapes** button, point to **My Shapes**, and then click **Perennials**.

   Visio opens the Perennials stencil and docks it to the left of the drawing page in the Shapes window.

6. On the Standard toolbar, click the **Shapes** button, and then click **Open Stencil**.

7. In the **Look in** box, navigate to the **12_Create** folder, and then double-click **Garden Perennials**.

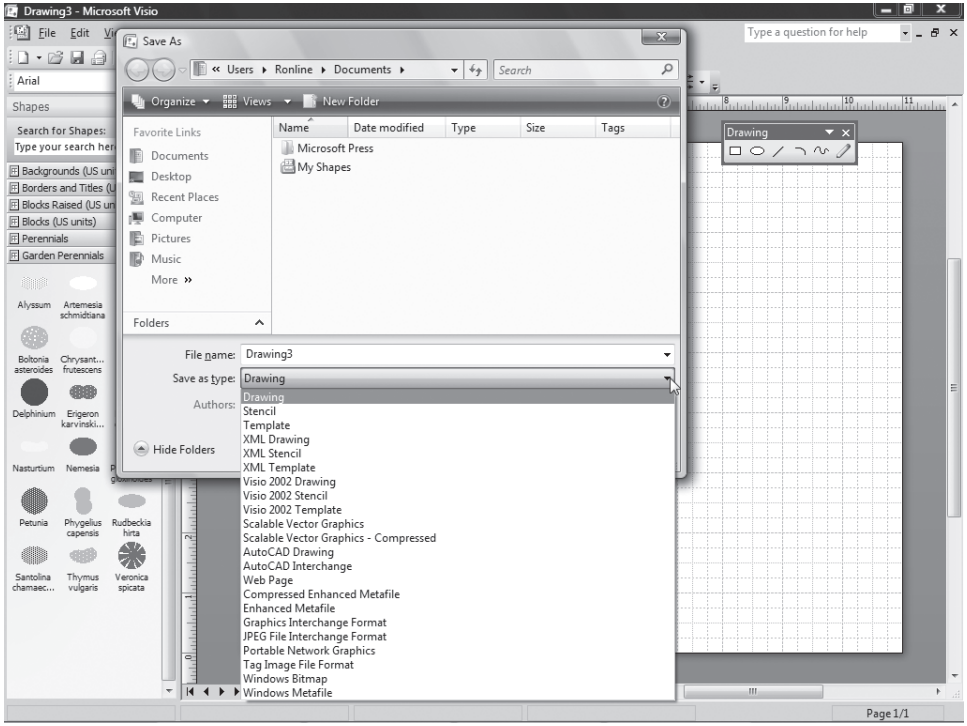
Visio opens the Garden Perennials stencil and docks it to the left of the drawing page in the Shapes window.



Tip You can also apply color and effect themes to templates. On the Format menu, click Theme to display the Theme – Colors task pane.

8. On the **File** menu, click **Save As** to open the **Save As** dialog box.
9. In the **Save as type** box, click the down arrow.

   Visio displays a list of file types.



10. Click **Template (*.vst)**, which stands for *Visio template*.

11. In the **File name** box, select the existing text, and type **Garden Plan**.

12. Click the **Save** button.

Visio saves the new template, Garden Plan, in the Documents folder by default.

13. On the **File** menu, click **Close**.

Visio closes the template.

14. On the **File** menu, click **Open**.

Visio displays the Open dialog box, which shows the contents of Documents folder by default.

15. In the **Open** dialog box, double-click **Garden Plan**.

Visio opens a blank, landscape drawing page, the Perennials stencil, the Garden Perennials stencil, and three other stencils.

16. On the **File** menu, click **Exit** to close Visio.

Key Points

- To display the Drawing toolbar, click the Drawing Tools button on the Standard toolbar.
- Hold down the Shift key while dragging the Rectangle tool to create a square. Hold down the Shift key while dragging the Ellipse tool to create a circle.
- Exaggerate your mouse movements when using the Pencil tool to make sure Visio interprets the movement correctly.
- If you can't find a shape you want in the Search For Shapes box, draw your own shape from scratch or modify a similar shape.
- You can modify shapes by adding, moving, and deleting vertexes and control points with the Pencil tool or Pointer tool. Position the Pointer tool over a custom shape to display the shape's vertices and control handles.
- To create more complex shapes, group two or more individual shapes. Use the Shift+Ctrl+G keyboard shortcut to quickly group shapes.
- To modify a shape within a group, select the group, and then subselect the shape you want to modify.
- Use the Operations commands on the Shape menu to merge shapes.
- Save the shapes you want to reuse on a custom stencil or the Favorites stencil.
- To display custom stencils on the My Shapes submenu, save them in the My Shapes folder.
- To open custom stencils, click the Shapes button on the Standard toolbar.
- If you use the same custom diagram settings for many diagrams, you can create your own template based on your preferences. To save a diagram as a template, in the Save As dialog box, in the Save as type box, click Template (*.vst).