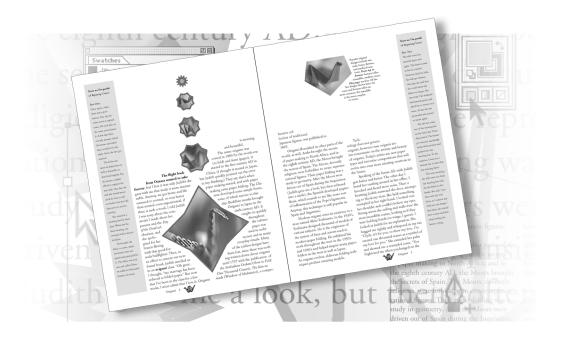
3 Working with Frames



InDesign frames can hold either text or graphics. As you work with frames, you'll notice that InDesign provides a great amount of flexibility and control over your design. In this introduction to working with frames, you'll learn how to do the following:

- Resize text frames
- Use anchor points to reshape a text frame
- Copy a graphic into a frame
- Convert a graphics frame to a text frame
- Wrap text around an object
- Create and rotate a polygon frame
- Center and scale an object within a frame

Getting started

In this lesson, you'll work on a two-page magazine article on origami. Before you begin, you'll need to restore the default preferences for Adobe InDesign. Then you'll open the finished document for this lesson to see what you'll be creating.

- 1 To ensure that the tools and palettes function exactly as described in this lesson, delete or deactivate (by renaming) the InDesign Defaults file and the InDesign SavedData file. See "Restoring default preferences" on page 2.
- 2 Start Adobe InDesign.

To begin working, you'll open an existing InDesign document.

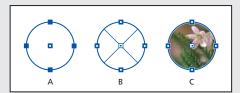
3 Choose File > Open, and open the 03_a.indd file in the ID_03 folder, located inside the Lessons folder within the IDCIB folder on your hard disk. If an alert message appears that asks which dictionary file you want to use, click No (Windows) or Document (Mac OS).

4 Choose File > Save As, rename the file **03_frames.indd**, and save it in the ID_03 folder.

About paths and frames

You can draw objects in your document and use them as paths or as frames:

- Paths are vector graphics like those you create in a drawing program such as Adobe Illustrator.
- Frames are identical to paths, with only one difference—they can be containers for text or other objects. A frame can also exist as a placeholder—a container without contents. As containers and placeholders, frames are the basic building blocks for your document's layout.



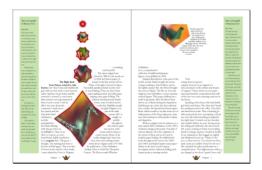
A. Path B. Frame as a graphic container C. Frame with a placed graphic

You can draw both paths and frames using tools in the toolbox. You can also create frames simply by placing (importing) or pasting contents into a path.

Because a frame is simply a container version of a path, you can do all of the things to a frame that you can do to a path, such as add a color or a gradient to its fill or stroke, or use the pen tool to edit the shape of the frame itself. You can even use a frame as a path, or vice versa, at any time. This flexibility makes it extremely easy to change your mind and provides a wide range of design choices.

-- From the Adobe InDesign User Guide, Chapter 6

5 If you want to see what the finished document will look like, open the 03_b.indd file in the same folder. You can leave this document open to act as a guide as you work. When you're ready to resume working on the lesson document, choose its name from the Window menu.



For a color version of the finished document, see the color section.

Note: As you work through the lesson, feel free to move palettes around or change the magnification to a level that works best for you. For more information, see "Changing the magnification of your document" on page 50 and "Using the Navigator palette" on page 57.

Modifying text frames

You can move, resize, and manipulate text frames. The tool you use to select a frame determines how you can change it:

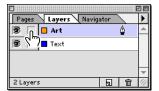
- Use the type tool (T) to type or edit text within the frame.
- Use the selection tool (\mathbf{k}) to move or resize the text frame using its bounding box. The *bounding box* is a rectangle that represents the object's horizontal and vertical dimensions. When you select a text frame, it appears as a bounding box with eight solid handles.
- Use the direct-selection tool ($\mbox{\ensuremath{\mathbb{R}}}$) for tasks involving drawing and editing paths, frames or frame contents, or to move anchor points on a path. When you select an object using this tool, it displays special handles called anchor points that make up the path.

Resizing text frames

If you want to resize a text frame and the text inside simultaneously, you use the scale tool. You'll use the scale tool later in this lesson. For now, you'll resize a text frame using the selection tool. That way, the text inside remains the same size but may wrap differently (have different line breaks) or display more or less text than before.

This document includes two layers: Art and Text. You'll lock the objects on the Art layer so that you won't accidentally select the shapes while you resize the text frames.

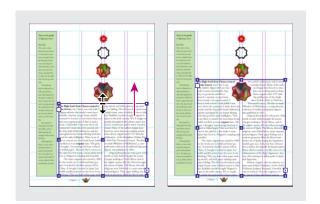
1 Click the Layers palette tab, and then click the lock box to the left of the Art layer.





The objects on the Art layer are now locked. You'll now resize the bounding box of a text frame.

- 2 Using the selection tool $(\ \ \)$, click anywhere in the main story text frame on the left page. Notice that the text frame has eight solid handles and a center point.
- 3 Drag the top center handle up to resize the height of the frame so that it snaps to the next horizontal guide above (near 22 picas on the vertical ruler).



Before and after resizing text frame

Notice that after you resized the frame, text flows throughout the entire frame. Also, the bottom image has a text wrap applied to it, so the text flows around the image.

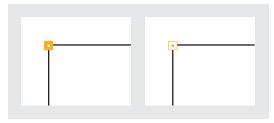
Using anchor points to reshape a text frame

When working with frames, pay attention to which selection tool you're using. When you use the selection tool to resize a text frame, the text frame maintains its rectangular shape. When you use the direct-selection tool, dragging a selected anchor point will change the shape of the frame.

1 With the text frame on the left-hand page selected, click the direct-selection tool ($\makebox{$k$}$) in the toolbox.

Four handles, called *anchor points*, now appear on the selected text frame. In this case, all anchor points are selected.

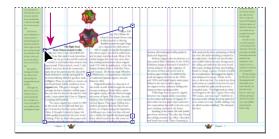
2 Click in a blank area outside the text frame, and then click the edge of the text frame. Notice that the path of the frame is selected, but none of the anchor points are selected.



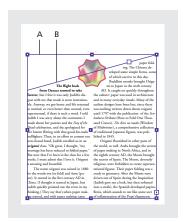
Selected anchor point (left) and unselected anchor point (right)

3 Click the upper left anchor point of the text frame, and drag the anchor point down so that it snaps to the horizontal guide below it. (After you start dragging, you can hold down Shift to constrain the frame.) Because only one anchor point is selected, dragging affects only the segments connected to the anchor point.

Make sure you drag only the anchor point—if you drag just below the anchor point, you'll move the text frame.



4 Select the selection tool (▶).



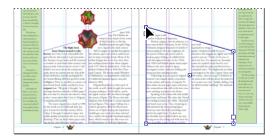
A. Bounding box B. Frame

Now you can see the difference between the bounding box and the path of the text frame. Notice that the bounding box is a rectangle with eight handles and a center point.

Next, you'll resize the text frame on the right page of the spread so that it mirrors the text frame on the left page.

5 Click a blank area of your document to deselect the text frame.

6 Select the direct-selection tool (♠). Holding down Shift, drag the upper left handle of the text frame up to the next horizontal guide so that the text frame on the right page mirrors the left page; release the Shift key. The Shift key constrains the point on the line.



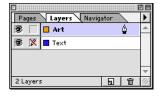
7 Choose File > Save.

When no insertion point is placed, you can press a or v to toggle between the selection and direction-selection tools. Your Quick Reference Card provides a list of many other shortcut keystrokes.

Modifying graphics frames

To understand the difference between resizing a frame and resizing the bounding box, you'll import an image and then resize the frame. First you'll unlock the Art layer and lock the Text layer.

1 In the Layers palette, unlock the Art layer and lock the Text layer. Click the Art layer to select it.



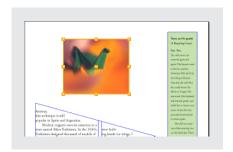
- 2 To center the right page in the document window, choose 5 from the Pages pop-up menu at the bottom of the document window.
- 3 Choose View > Hide Guides. You won't be snapping the object to any guides.
- **4** Choose Edit > Deselect All to make sure no items are selected (if another frame is selected, the graphic you place will be inserted into the selected frame).

5 Select the selection tool (♠). Choose File > Place, and then double-click 03_c.tif in the ID 03 folder.

The pointer changes to a loaded graphics icon ().

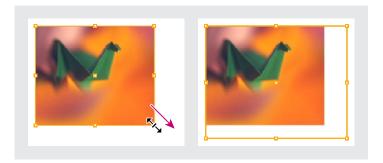
Note: If the pointer appears with a line through it (X) when you try to use the selection tool, the current layer is locked but still selected. You cannot add objects to a locked layer. Select and unlock the Art layer in the Layers palette and proceed.

6 Click near the top of page 5 to place the graphic.



When you place a graphic in your document, the content fits within a frame. The content and the graphics frame are separate items, each with its own bounding box.

7 Using the selection tool, make sure the placed graphic is selected. Drag the lower right handle away from the center of the graphic to enlarge the frame. Don't worry about dragging a precise distance.



You have just resized the frame, but the content remains the same size. The content and frame are separate objects; the frame determines which part of the content is shown. Now you will crop the image by resizing the frame.

8 Drag the lower right handle toward the center of the frame to crop the photograph so that the origami image is centered within the frame.



9 Choose File > Save.

Changing the shape of the frame

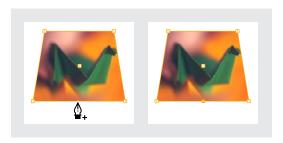
When you resized the frame using the selection tool, the frame maintained its rectangular shape. Now you will use the direct-selection tool to reshape the frame.

- 1 Click a blank area outside the image to deselect it.
- **2** Click the direct-selection tool ($\makebox{\ensuremath{$k$}}$), and then click the edge of the frame.
- **3** Drag the upper left point a short distance (approximately 1 pica) to the right. While dragging, you can hold down the Shift key to constrain the line.
- 4 Click the upper right point to select it, and then drag it an equal distance to the left.



Now you will use the pen tool to add a new anchor point to the frame.

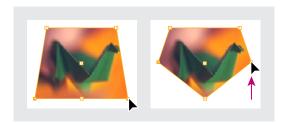
5 Click the pen tool (4). Hold the pointer over the center of the bottom line of the object so that the pen tool has a plus sign (Φ_+) , and click. A new point is added.



6 Select the direct-selection tool, and then click the lower left anchor point. While holding down Shift, click the lower right anchor point so that both anchor points are selected.

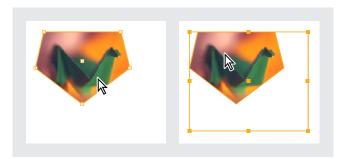
In addition to letting you constrain a line while dragging, the Shift key lets you select multiple points.

7 Drag one of the anchor points approximately halfway toward the top of the image. After you start dragging, hold down the Shift key to constrain the shape. Notice that both points move simultaneously.



Now you will center the image within the frame.

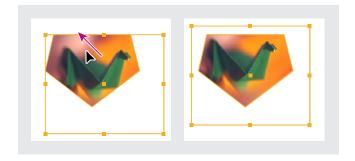
8 With the direct-selection tool still selected, click the image inside the frame to select it.



Selected frame (left) and selected content (right)

In general, when you select an object with the direct-selection tool, hollow points appear. The exception is imported graphics, which always display a rectangle with eight handles. This is a reminder that you can only move or resize imported bitmaps, not radically alter their shape as you can with frames.

9 Drag the selected object up and to the left so that the origami figure is centered within the frame.

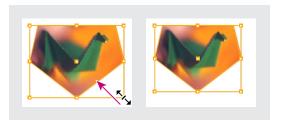


The frame acts as a mask to the content. As you can see, the content and frame of a graphic can be manipulated independently.

Resizing the graphic and frame simultaneously

Now you'll make the graphic and frame a bit smaller. You can use the Control or Command key to resize the frame and content simultaneously. As is true in most graphics programs, you can hold down the Shift key while dragging to resize an object proportionally.

- 1 Select the selection tool (\mathbf{k}) , and select the graphic you've been working on.
- 2 Holding down Shift+Ctrl (Windows) or Shift+Command (Mac OS), drag the lower right handle toward the center of the object to reduce its size.



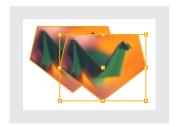
Notice that both the content and the frame are resized. As you can see, the Ctrl or Command key is useful for resizing the content and frame simultaneously.

3 Choose File > Save.

Converting a graphics frame to a text frame

Frames can hold either text or graphics. Next, you'll copy and paste the graphics frame so that you can replace the image in the copied frame with text.

- 1 With the frame still selected with the selection tool (\triangleright), choose Edit > Copy.
- 2 Choose Edit > Paste, and then drag the pasted graphic so that it overlaps the lower right area of the original frame.



3 Select the direct-selection tool (\S), and click the image in the pasted frame. Choose File > Place, and then double-click 03_d.doc in the ID_03 folder.

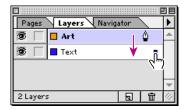
When you place a text file, it flows into the selected frame and replaces the contents.

As you can see, frames can contain either text or graphics. Now you'll make sure the text frame belongs to the Text layer instead of the Art layer.

- 4 Click the Layers palette tab.
- **5** In the Layers palette, click the lock icon (\cite{N}) next to the Text layer to unlock objects on the Text layer.

In the Layers palette, the small dot to the right of the layer name indicates which layer the selected object belongs to. You can change an object's layer by dragging this dot to a different layer.

6 With the text frame selected, drag the small dot from the Art layer to the Text layer.

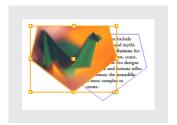


The text frame now belongs to the Text layer. The Art layer is above the Text layer in the Layers palette, so the object on the Art layer hides part of the object on the Text layer.

Wrapping text around an object

You can wrap text around the frame of the object or around the object itself. Now you'll see the difference between wrapping text around the bounding box and wrapping text around the graphic.

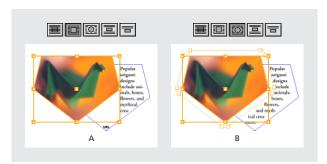
1 Using the selection tool (♠), select the five-sided graphics frame (not the text frame) on page 5.



2 Choose Object > Text Wrap. Select the second wrap option so that the text wraps around the bounding box.

The text wraps around the bounding box of the image, not around the image itself.

3 Next, select the third wrap option so that the text wraps around the contour of the image. The text wraps around the graphic instead of the bounding box.

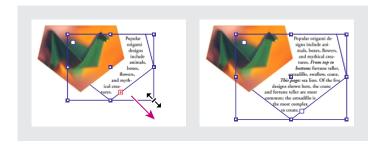


A. Text wrapped around bounding box **B.** Text wrapped around content

4 Close the Text Wrap palette.

The text frame is not large enough to hold all the text in the frame, so you will resize it.

5 Using the selection tool, click the text frame to select it. Holding down Shift, drag the lower right handle away from the center of the frame to enlarge it until you can see all the text.

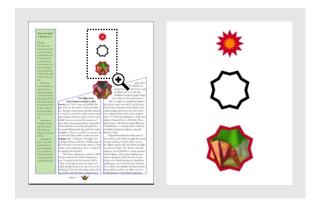


6 Choose File > Save.

Fitting the content to the frame

Now that you have completed page 5, you will turn your attention to page 4. Because the four objects on page 4 are grouped, you cannot use the selection tool to select one of the frames unless you ungroup the objects first. However, you can use the direct-selection tool to select an object within a group. You'll add a photograph to the second shape from the top.

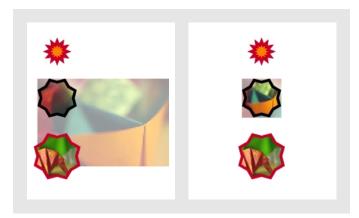
1 Click the Pages palette tab, and then double-click the page 4 icon. To zoom in, select the magnification tool (\mathfrak{P}_{\bullet}) , and then drag across the top three shapes.



2 Select the direct-selection tool (♠), and then select the frame with the black stroke. Choose File > Place, and then double-click 03_e.tif in the ID_03 folder.

The object is placed within the frame. However, because the graphic is much larger than the frame that masks it, you can see only a small part of the graphic. To fix this, you'll fit the content within the frame.

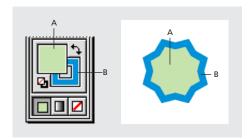
3 With the frame still selected, choose Object > Fitting > Fit Content to Frame to resize the graphic so that it fits in the frame.



Before and after using Fit Content to Frame

Modifying the stroke of a frame

A frame's outline is called a *stroke*. A color or gradient applied to a frame's enclosed area is called a *fill*. The icons in the toolbox determine whether the fill or stroke is affected.



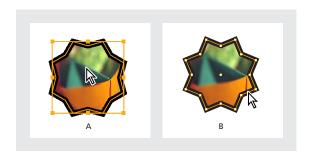
A. Fill B. Stroke

Changing the stroke color of the frame

Now you'll change the stroke color of the shape to red.

When a frame contains a bitmap graphic like this one, you must click the edge of the frame to select the frame; selecting inside the frame selects the graphic.

- 1 Using the direct-selection tool (\(\bar{\chi} \), click the graphic within the frame. Notice that the graphic is selected, not the frame.
- 2 Using the direct-selection tool, click the black stroke to select the frame instead of the graphic.



A. Selected graphic B. Selected frame

- 3 Select the Stroke box (♣) in the toolbox. Choose Window > Swatches, and then select Red in the Swatches palette (you may need to scroll).
- **4** Choose File > Save.

Drawing a polygon

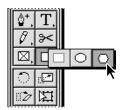
Now you'll draw a polygon. A polygon, like any graphic composed of paths, can act as a frame. To see this, you'll place a graphic within the polygon. To make the page less cluttered, you'll hide objects on the Text layer.

- 1 Choose View > Fit Page in Window. Click a blank area of your document window to make sure no objects are selected.
- **2** Click the Layers palette tab, and then click the eye icon next to the Text layer to hide the Text layer. Make sure the Art layer is selected.



Objects on the Text layer are hidden.

- **3** Choose View > Show Guides.
- **4** Position the pointer over the rectangle tool in the toolbox, and then drag to select the polygon tool (\bigcirc) .

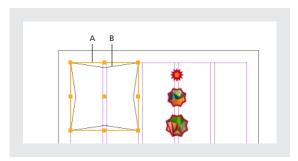


5 Double-click the polygon tool to display the Polygon Settings dialog box.



You can change the number of sides as well as the inset percentage, which bends the polygon lines inward to form a star-shaped object in some cases.

- **6** For Number of Sides, type **4**. For Star Inset, type **15** and then click OK.
- 7 Holding down Shift to maintain an equal height and width, drag to create a shape that is the width of two columns, as shown below.



A. Bounding box B. Frame

Note: If the pointer appears with a line through it (X) when you try to use the polygon tool, the Text layer is hidden but still selected. You cannot add objects to a hidden layer. Select the Art layer in the Layers palette and try again.

Changing the weight of the stroke

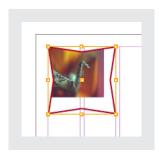
Now you'll change the stroke thickness of the polygon's frame and place a graphic within the polygon. You'll open the Stroke palette to change the weight, or thickness, of the stroke.

- 1 With the polygon still selected, choose Window > Stroke. For Weight, type 4 and press Return or Enter. Close the Stroke palette.
- 2 Make sure the Stroke box (15) in the toolbox is selected. Then select Red in the Swatches palette.

Next, you'll place a graphic within the frame.

- **3** With the object still selected, choose File > Place.
- 4 Double-click 03 f.tif in the ID 03 folder.

The graphic is placed within the selected frame. You'll scale this graphic after you rotate the frame.



5 Choose File > Save.

Transforming a frame

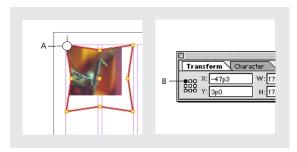
You use the Transform palette to view or modify an object's location and dimensions and to transform it in various ways, such as shearing or rotating. You can transform frames just as you would any graphic object.

Rotating the frame

The content resides within the polygon frame. The frame and content are independent of each other, so you can rotate the frame without rotating the content. If you use the selection tool, you can rotate both frame and content. If you use the direct-selection tool, you can rotate either.

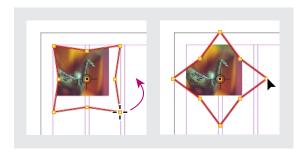
- 1 Select the direct-selection tool ($\mbox{\ensuremath{\wp}}$). Make sure all the points in the polygon frame are selected so that the entire frame will be rotated. To select all the points, you can click the center point, or you can hold down Alt (Windows) or Option (Mac OS) and click any point.
- **2** Select the rotation tool ().

The crosshair icon, which appears in the upper left handle, determines the point of the rotation. You can change the crosshair location by clicking the corresponding point in the proxy icon of the Transform palette.



A. Crosshair B. Proxy icon

- 3 Click the center point in the proxy icon of the Transform palette to move the crosshair icon to the center of the selected frame.
- 4 Drag any handle to rotate the object 45° in either direction. Or, to be precise, you can type **45** in the Rotation box of the Transform palette and press Return or Enter.



If you hold down Shift while dragging the point, the object snaps to 45° increments.

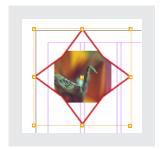
Notice that the polygon shape rotates around its center. This is because you selected the center point in the proxy icon.

5 Choose File > Save.

Centering and scaling the graphic

Now you'll center the graphic within the frame and then scale the graphic so that it fills the frame.

1 Select the selection tool (♠), and then click the polygon to select it. Choose Object > Fitting > Center Content.



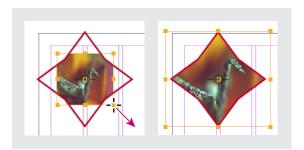
The graphic is centered within the frame.

2 Select the direct-selection tool ($\mbox{\ensuremath{\mathbb{R}}}$), and click the graphic to select the content (not the frame). Notice that all the anchor points are selected.

Now you'll use the scale tool to resize the graphic. Unlike the selection tool, the scale tool lets you resize an object from the center outward. Using the scale tool also displays the change in size as a percentage as you drag.

3 Select the scale tool (). In the Transform palette, select the center point in the proxy icon.

4 Holding down Shift, drag a corner handle outward until the graphic fills the polygon frame. Release the Shift key.

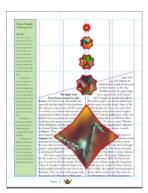


5 Choose Edit > Deselect All.

Finishing up

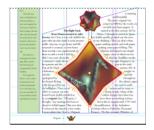
Now you'll place the graphic at the bottom of the page and wrap the text around it. Then you'll hide guides and palettes to look at the finished spread.

- 1 In the Layers palette, click the left-most box next to the Text layer to show objects on the Text layer.
- 2 Select the selection tool (), and drag the polygon to the bottom of page 4, centered between the grouped objects and the bottom margin, as shown.



Notice that this object is overlapping the text. You'll wrap text around it.

3 With the object still selected, choose Object > Text Wrap. Select the third wrap option.

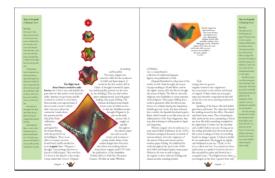




4 Close the Text Wrap palette, and then choose Edit > Deselect All.

Now you'll hide guides, frame edges, and palettes to view your spread.

- **5** Choose View > Fit Spread in Window. Choose View > Hide Frame Edges, and then choose View > Hide Guides.
- **6** Press Tab to hide the toolbox and palettes. Choose File > Save.

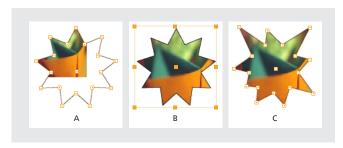


Congratulations. You have finished the lesson.

On your own

One of the best ways to learn about frames is to experiment on your own. In this section, you will learn how to nest an object inside a shape you create. Follow these steps to learn more about selecting and manipulating frames:

- 1 Using the direct-selection tool ($\makebox{\ensuremath{$\wp$}}$), select and copy any image on page 4 or 5.
- 2 To create a new page, choose Insert Pages from the Pages palette menu and then click OK.
- 3 Use the polygon tool to draw a shape on the new page (use any number of sides or star inset). Select the shape using the direct-selection tool, and then choose Edit > Paste Into to nest the image inside the frame. (If you choose Edit > Paste, the object will not be pasted inside the selected frame.)



A. Image pasted into frame B. Image moved and scaled within the frame C. Polygon frame reshaped

- **4** Use the direct-selection tool to move and scale the image within the frame.
- **5** Use the direct-selection tool to change the shape of the polygon frame.
- **6** Use the selection tool () to rotate both the frame and the image. Use the directselection tool to rotate only the image within the frame.
- 7 When you are done experimenting, close the document without saving. For more information on nesting frames within frames, see Lesson 9.

Review questions

- 2 How do you resize a frame and its contents simultaneously?
- 3 How do you rotate a graphic within a frame without rotating the frame?
- 4 Without ungrouping objects, how do you select an object within a group?

Review answers

- 1 Use the selection tool ($\mbox{\ensuremath{\$}}$) for general layout tasks, such as positioning and sizing objects. Use the direct-selection tool ($\mbox{\ensuremath{\$}}$) for tasks involving drawing and editing paths or frames; for example, to select frame contents or to move anchor point on a path.
- 2 To resize a frame and its contents simultaneously, select the selection tool (♠), hold down Ctrl (Windows) or Command (Mac OS), and then drag a handle. Hold down Shift to maintain the object's proportions.
- **3** To rotate a graphic within a frame, use the direct-selection tool to select the graphic within the frame. Select the rotation tool (), and then drag one of the handles to rotate only the graphic, not the frame.
- **4** To select an object within a group, select it using the direct-selection tool.