



INTRODUCTION TO GRAPHIC COMMUNICATIONS

St. Patricks Day Shamrock

Information
Sheet No.

IL996

THIS IS AN ILLUSTRATOR PROJECT

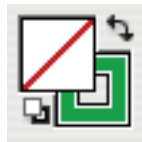
In working the project you will be drawing a Shamrock and getting an Introduction to the Gradient Mesh Tool in Illustrator

The Gradient Mesh tool lets you selectively apply color using a mesh. Not only can you decide where the color is placed on the image, the mesh is connected by points that can be moved to adjust where the color lies on the image. The curve of the mesh itself can also be adjusted using bezier handles. This is a great way to add shading or a painted look to the vector images you draw in Illustrator.

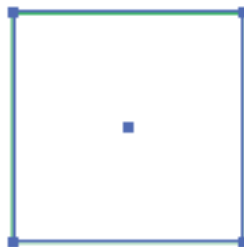
DRAWING THE SHAMROCK

You're going to use three identical hearts to draw the shamrock. This tutorial uses Illustrator CS, but it will work in any version, however some of the commands may be in different places.

Step 1. Start a new document in Illustrator (File > New) in RGB color. Turn on the Rulers (View > Rulers). Right click on the ruler to set the unit of measurement and choose pixels. Pixels were selected because this is for the web. If you are designing for another medium, use measurements appropriate for it. In the color boxes at the bottom of the toolbox, choose no fill and a green outline. This so that you can see better to line up the diamond and circles you'll be using to make the heart which will be used for the individual shamrock leaves.



Step 2. Select the rectangle tool from the tool box. Click the mouse once on an empty space on the art board to open the rectangle tool options, and type in 72 for both width and height. Click OK and a 72 pixel square will appear on the art board.



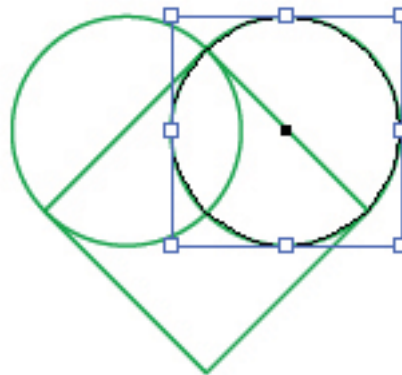
Step 3. Go to Object > Transform > Rotate. Enter 45 for the degree of the angle and click OK. You should have a diamond shape.

Step 4. Choose the ellipse tool from the tool box and click once on the art board to open the tool options. Again, enter 72 for both width and height. Click OK and the circle appears on the art board. Make sure View > Snap to Point is enabled. Drag the circle so it lines up exactly on the upper left slant of the diamond. You will feel a small “snap” as the circle snaps into place on the square.

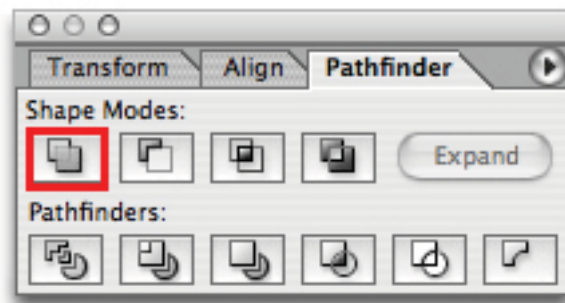


Step 5. Click once on the circle outline to select it. Because it has no fill, you will have to be careful to click on the outline of the circle. Go to Edit > Copy, and then Edit > Paste in Front. Even though you cannot see it, this has placed a perfect copy of the circle directly on top of the original one, and it will be selected.

Step 6. Tap the right arrow key repeatedly to move the new circle to the right until it snaps into place on the upper right slant of the diamond.



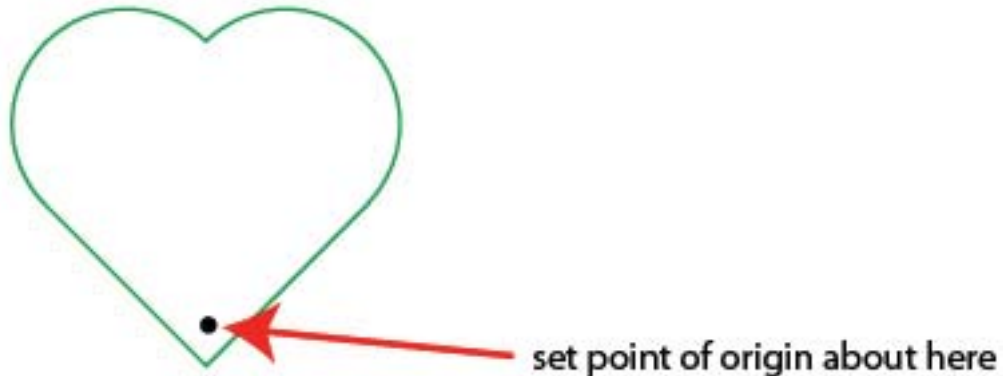
Step 7. Select all three pieces (Select > All) and go to the Pathfinder palette. If it isn't open, go to Window > Pathfinder to open it. Windows: Alt + click on the Add to shape area button to combine and expand the shapes at the same time.



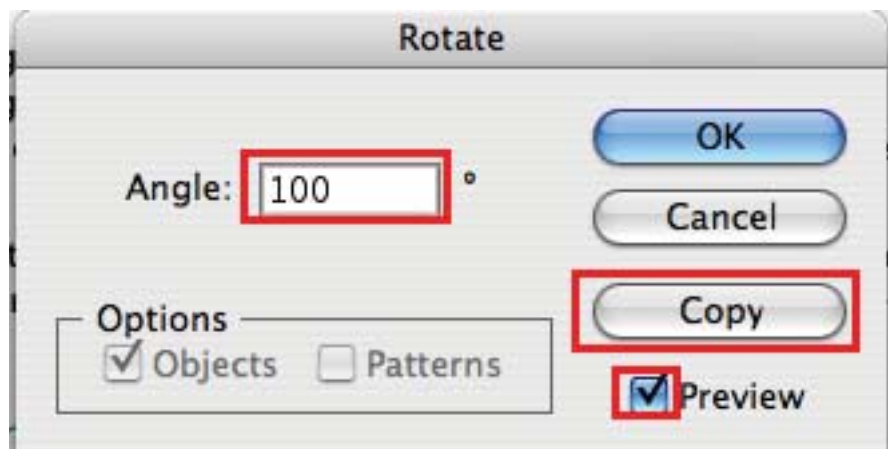
And here's the resulting heart. Now you have one leaf of the shamrock.



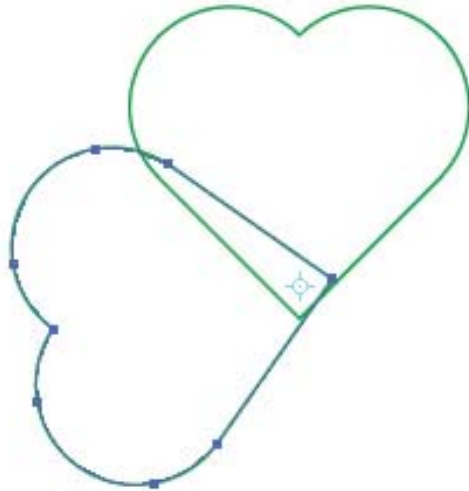
Step 8. We need to make two copies of the heart and rotate them to make the other leaves of the shamrock. First select the heart by clicking on its outline. This heart will be referred to as Heart 1. In the toolbox activate the Rotate tool by clicking on it. Hold the alt key and click the cursor just above the bottom point of the heart. This will set the point of origin for the rotation, and at the same time open the Rotate options box. By default, the point of origin is the center of an object unless you change it.



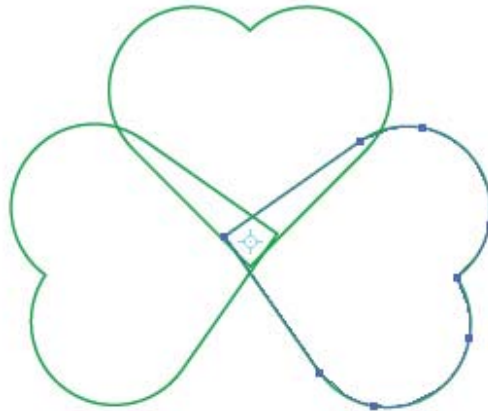
Step 9. In the Rotate options enter 100 for the angle, and click the Copy button. This will rotate the heart and make a copy at the same time. Clicking the preview checkbox allows you to see where the new heart will be placed.



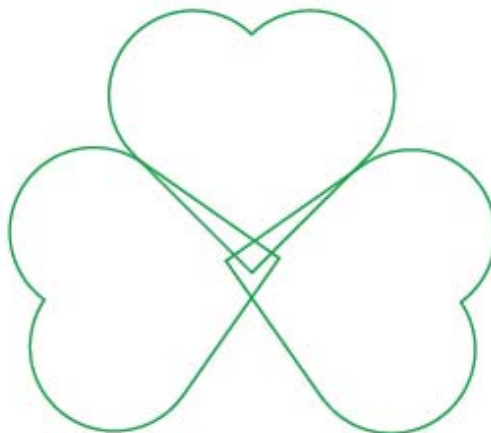
Heart 1 is copied and rotated so you now have Heart 1 and Heart 2.



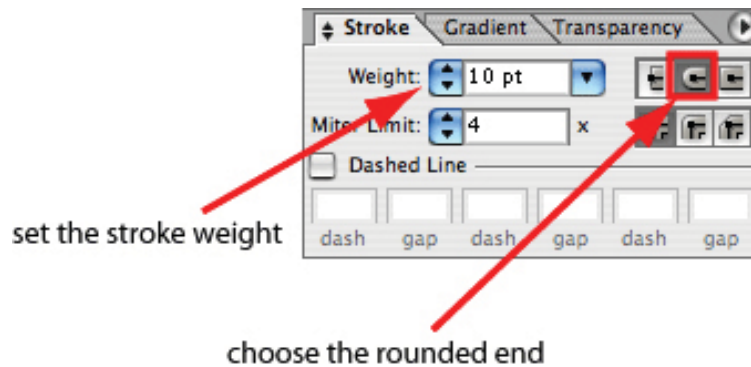
Step 10. The Rotate tool should still be active in the toolbox. Select Heart 1 again, set the point of origin as before, and using the alt key, click the cursor just above the bottom point of the heart. This time set the Angle of rotation to -100° , and click the Copy button. You should now have three shamrock leaves.



Step 11. Select Heart 2 and Heart 3 (click on one, hold shift and click the other, making sure to click the outlines to select), and press the down arrow key about 6 times to move them downward. They will still intersect, but not quite as much, and they'll make a better shamrock shape.



Step 12. Now we need a stem. Activate the arc tool. It's on the Line tool popout menu. (If you have Illustrator 9, you'll have to draw the stem with the pen tool. Make a curved line). Draw an arc about a inch or so long. In the stroke palette, set the stroke width to 10 and choose rounded ends for the stroke. (If you can't see the stroke palette, go to Window > Stroke to show it.)



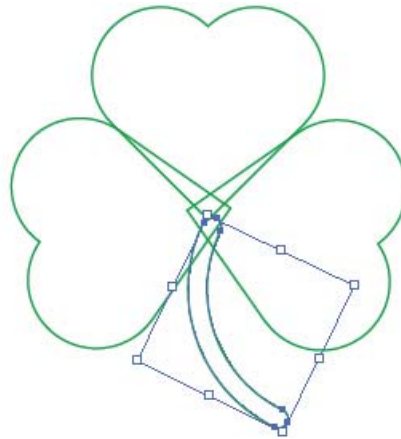
Step 13. You need to make the stem into an object; right now it is a stroke. Go to Object > Path > Outline Stroke. Before you could see the stroke; now you can see points around the shape.



Step 14. With the stem selected, swap the fill and stroke colors by typing Shift + X so the stem has no fill and the stroke is the same color as the three hearts.



Step 15. Position the stem over the bottom points of the hearts as shown. Hover the mouse over the corner of the stem's bounding box to get the rotate cursor (the small double headed curved arrow cursor) and click and drag to rotate it if necessary to make it the right orientation for the shamrock. (You can tell from the bounding box this one was rotated slightly.)



Step 16. Select all three hearts and the stem, and hold Alt and click the Add to Shape button on the Pathfinder palette as before. This will combine all of the pieces into one object.



Step 17. Swap the fill and stroke again (Shift + X) so your shamrock has a solid green fill and no stroke. If your fill color wasn't green, change it now. Now, save your file. Now you can make a simple solid filled shamrock. Next you will use the gradient mesh tool to make a shaded shamrock. Did you notice that you can use part of this technique to create a heart for use in the Valentine Hearts in a Circle project?



Using the Gradient Mesh Tool

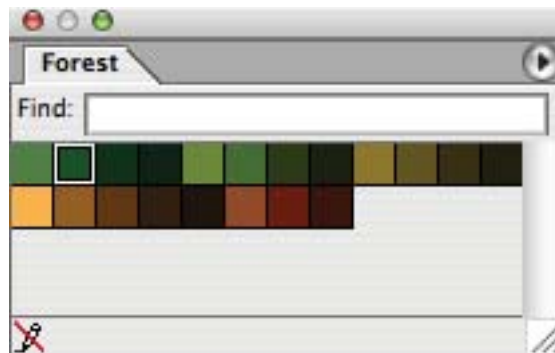
As mentioned at the start of this tutorial, the Gradient Mesh tool lets you selectively apply color using a mesh. One note about gradient meshes: if you change your mind and don't want to use a mesh after all, the only way to do that if you can't use the undo command is by deleting the object. Once it's a mesh object, it's always a mesh object, so make sure to save a copy first if you might change your mind!

One other very important thing you need to know about the Gradient Mesh tool is that it only works on objects with a solid color fill. If the object has a stroke, using the Gradient Mesh tool will remove the stroke. (Note: If you have an object with a gradient fill, you can't use the gradient mesh tool on the object unless you convert it to a gradient mesh object. You can convert to a gradient mesh object by going to Object > Expand.)

Step 1. Command/Control + N (File > New) to start a new document in RGB color mode. Follow steps 1 through 7 above to make the first leaf of the shamrock. Shift + X to fill the shamrock with green and remove the stroke.

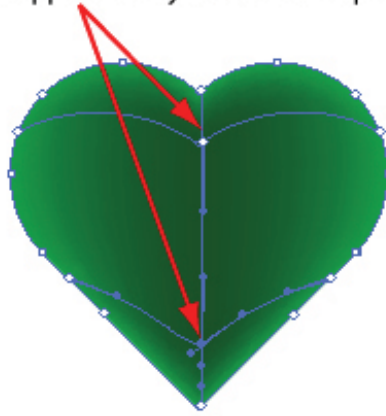


Step 2. In the Swatches palette (if you do not see the swatches palette, open it from Window > Swatches) open the options menu and choose Open Swatch Library then select Forest from the list. (In Illustrator 9 or 10, go to Window > Swatch Library. The particular set of swatches used here comes with Illustrator CS, but you can find greens in other swatches included with other versions.) You'll have some nice green shades to choose from. Set the foreground color to one of the darker greens (several shades darker than the base color of the shamrock leaf) by clicking on the chip.



Step 3. The Gradient Mesh tool looks like this: You can find it in the toolbox next to the gradient tool. Click on the tool to activate it. By clicking on the shamrock leaf you add a mesh point. The points are connected by mesh lines. Each time you click, another mesh point and mesh line will be added. Color (even a different color) can be added to each of the points after the mesh is made, or you can add color as you make the mesh. Click with the gradient mesh tool a bit above and below the center points of the heart shape as shown below to add two mesh points. Notice how the mesh points are joined by mesh lines, and there are bezier handles that can be used to alter the lines of the mesh.

click approximaely at these two spots



Step 4. Click away from the shamrock leaf to deselect. (Click away means click an empty spot on the art board). Change the fill color to a lighter color of green. After changing the color, you can select the shamrock again using the Selection tool (V), and click with the gradient mesh tool again to add some lighter spots on the shamrock on the right and left side of the leaf as shown below.

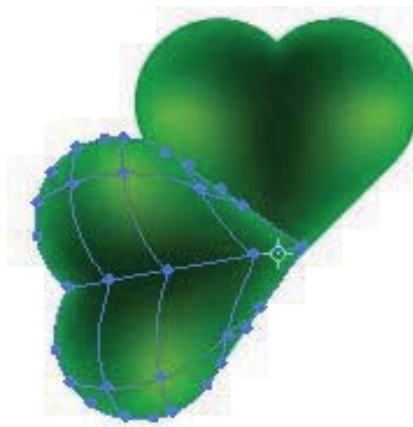
Things to remember:

- If you do not deselect before changing the fill color, the whole shamrock will change to the new color.
- You can change colors of an existing mesh point by clicking on it with the mesh tool and clicking a different color chip in the swatches. To make it easier to see you are on a mesh point with the mesh tool, turn on Smart Guides. (View > Smart Guides). With Smart Guides enabled, when you hover directly over a mesh point, you will see a label that says anchor.

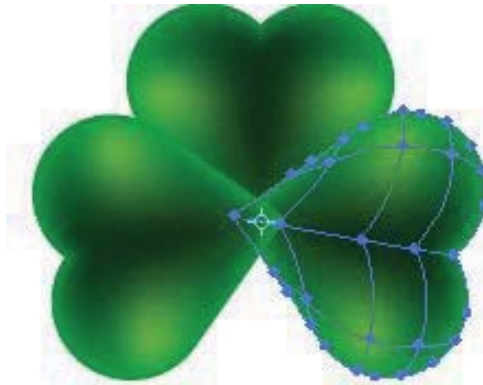
Step 5. Notice you now have even more bezier handles you can use to adjust the mesh curves as well as the ability to move the points by dragging them to place the color where you want it. If you need to, you can use the Direct Select tool (the white arrow, keyboard shortcut A) to click and drag to move the bezier handles to make the mesh fit the shape of the shamrock. Zoom in if you need to get closer to see well enough to grab a handle.

Step 6. Change to the selection tool (V). Make sure the leaf is selected. Activate the Rotate tool in the toolbox, and Alt + click on the leaf in the same place as you did on step 8 of the "Drawing the Shamrock" section above.

Step 7. In the Rotate options enter 100 for the angle, and click the Copy button. This will rotate the leaf and make a copy at the same time. Clicking the preview checkbox allows you to see where the new leaf will be placed.



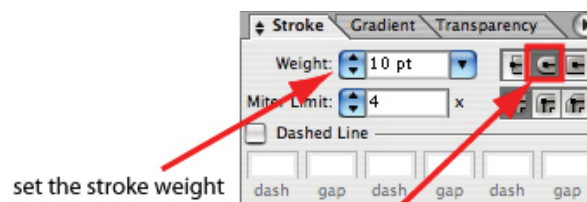
Step 8. The Rotate tool should still be active in the toolbox. Select the first leaf again, set the point of origin as before, and using the alt key, click the cursor just above the bottom point of the leaf. This time set the Angle of rotation to -100° , and once again, click the Copy button. You should now have three shamrock leaves.



Step 9. Use the selection tool or the arrow keys to move the leaves into a shamrock formation. Click the first leaf (the top one) with the selection tool to select it and move it to the front (Object > Arrange > Bring To Front).



Step 10. Now we need a stem. Activate the arc tool. It's on the Line tool popup menu. (If you have Illustrator 9, you'll have to draw the stem with the pen tool. Make a curved line). Draw an arc about a inch or so long. In the stroke palette, set the stroke weight to 10 and choose rounded ends for the stroke. (If you can't see the stroke palette, go to Window > Stroke to show it.)



Arc Arc with stroke width of 10



Step 11. We need to make the stem into an object; right now it is a stroke, the same as when we drew the first shamrock. Go to Object > Path > Outline Stroke. Before you could see the stroke; now you can see points around the shape.



Step 12. Use the gradient mesh tool to add some shading to the stem.



Step 13. Move the stem to the shamrock, and rotate if necessary as before. Send the stem behind the shamrock. (Object > Arrange > Send to Back) Select all four pieces and group them (Object > Group or Command/Control + G).



Step 14. Add some text, fill with a gradient, and warp it. To do this you will have to follow several steps. Text can't be filled with a gradient unless it is turned into outlines.

1. Type the text.

Erin Go Bragh

2. Click the Selection tool so you have a bounding box around the text and go to Type > Create Outlines. Now you can fill the text with a gradient the same as any object.

Erin Go Bragh

3. To warp the text go to Effect > Warp > Arc. This text is set at Horizontal at 50%. The rest of the settings are left at default.

Erin Go Bragh

And here is the final image! Happy St. Patrick's Day!

