



## INTRODUCTION TO GRAPHIC COMMUNICATIONS

# Interlocking Hearts

Information  
Sheet No.

IL829

### Drawing the heart

**Step 1.** With Valentine's Day just around the corner I thought hearts would be appropriate. First we'll draw the perfect heart in a few steps, then we will see how to interlock two hearts. To begin, start a new document.

Turn on the Rulers (**View > Rulers**). Right click on the ruler to set the unit of measurement and choose pixels. I chose pixels since we are working for the web.

Now go to **Edit > Preferences > Guides & Grid** and set **Gridline Every** to 36 px and **Subdivisions** to 1.

Turn on the Grid (**View > Grid**) to use as a visual aid.

Go to **View > Snap to Grid** so the tools will snap to the grid. This will make it easier to be accurate while we draw the heart.

My colors are set to the default white fill and black stroke.

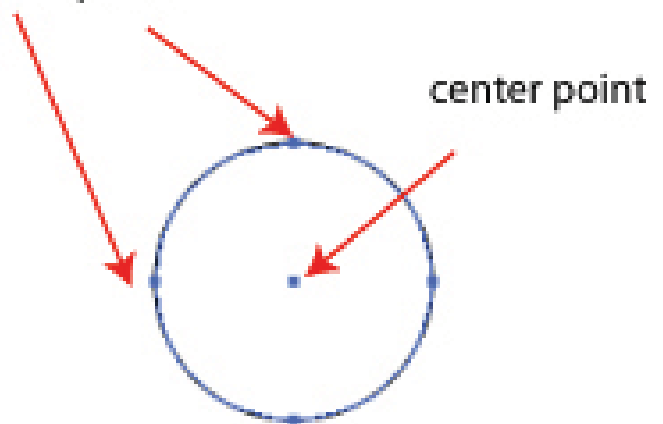
**Step 2.** Select the ellipse tool from the tool box. Place the cursor on an intersection point of the grid. Hold the option key (Mac) or alt key (Windows) and click once to open the ellipse options. Holding the opt/alt key will make the circle draw from the center; the center of the circle will be exactly where the cursor was when you opened the ellipse tool options.

Enter 288 for both width and height, then click OK. Because we chose pixels for unit of measurement, Illustrator will use pixels automatically. A 288 px by 288 px circle will appear on the page. You now have four anchor points joining curved line segments.

If you want to see the center point you will have to turn it on. To do this, go to

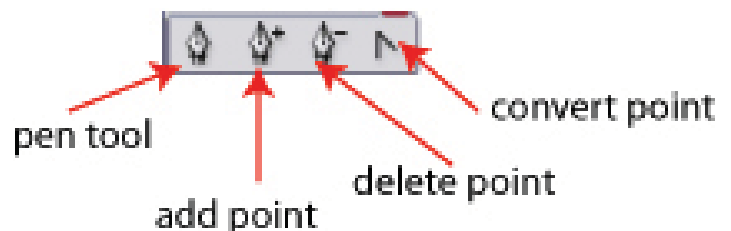
Window > Attributes to open the Attributes palette, and click either the Show Center button or the Don't Show Center button. This is a matter of preference.

### anchor points

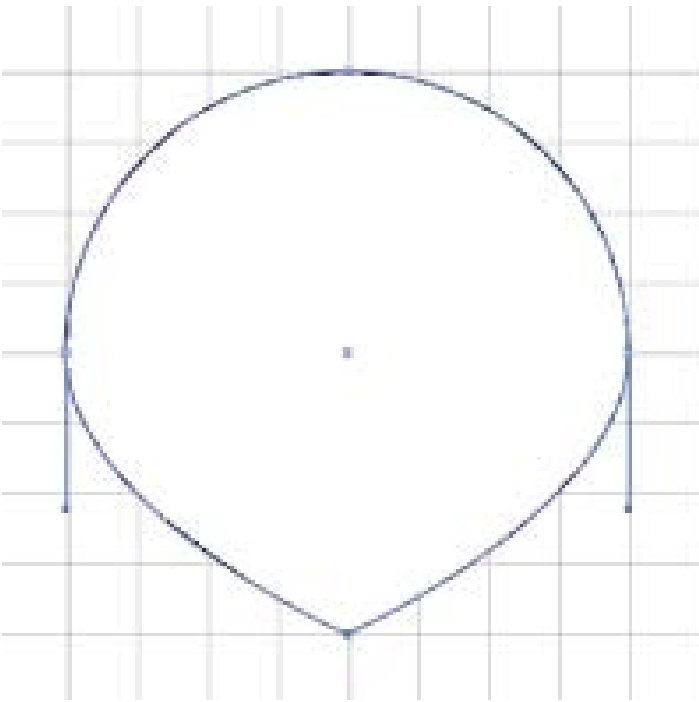


**Step 3.** In the pen tool flyout, choose the convert point tool. Right now you have four curved points. We need a couple corner points instead to make the circle into a heart.

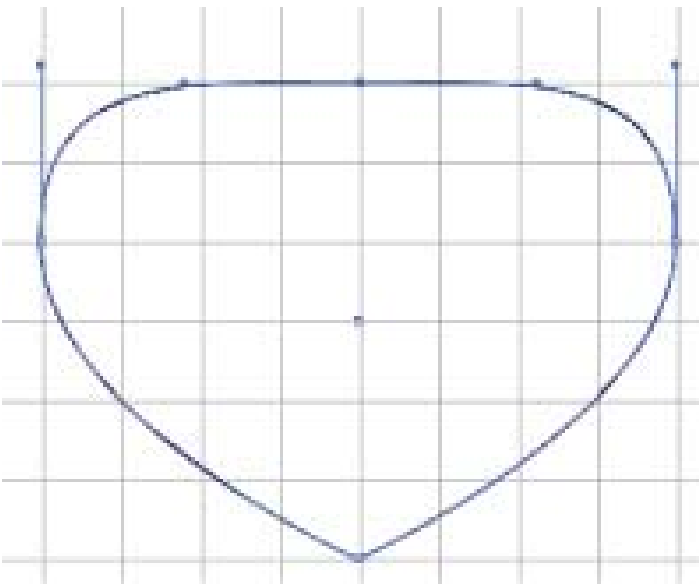
### Pen Tool Flyout



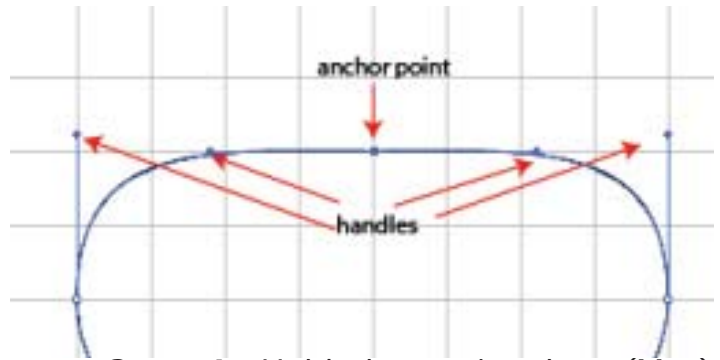
**Step 4.** Click the bottom anchor point of the circle once with the convert point tool to convert it to a corner point. If you have Smart Guides enabled, when you hover the cursor over the point a small label will appear that indicates it is an anchor point. Smart Guides are a lot of help but they can also be annoying so you can turn them off and on at anytime using View > Smart Guides.



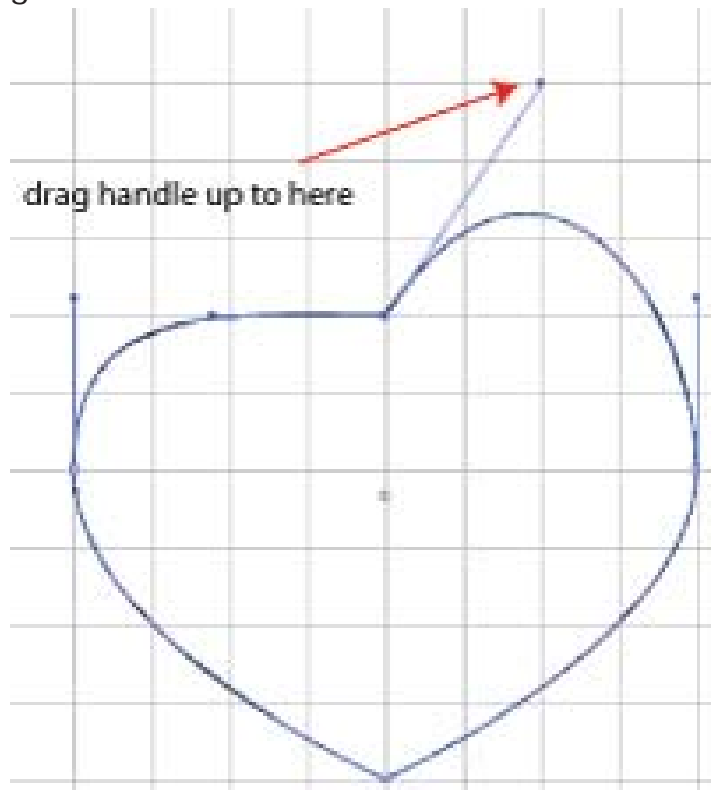
**Step 5.** Change to the Direct Selection tool (A) and click on the top anchor point and drag it down two squares. It might be easier if you have the fill turned off. To do this, make sure fill is the active square in the color boxes on the toolbox (that is, the fill square is on top), and click the none button under the color boxes. It's a white square with a red line across it.



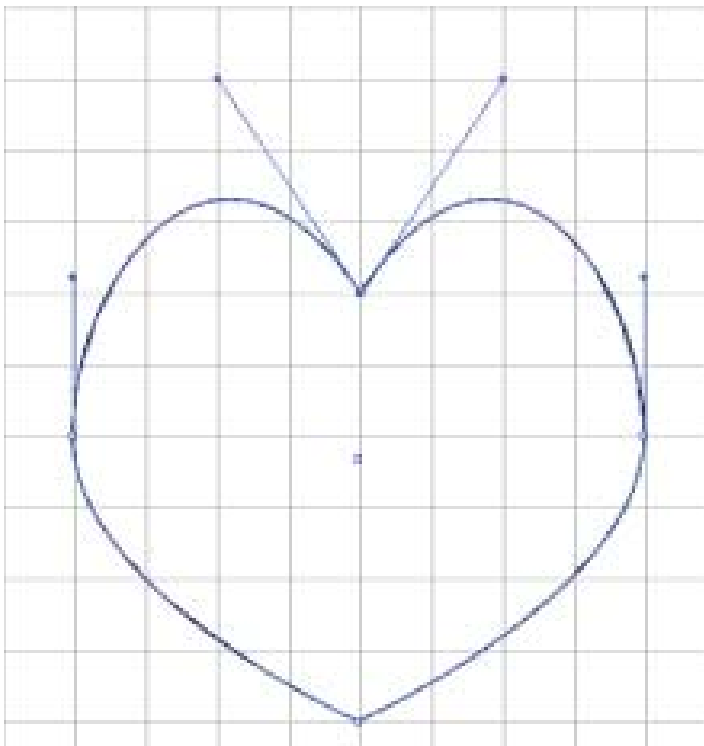
The anchor point has two handles extending from it. Moving these handles will adjust the curve between the the top and side anchor points. (The two vertical handles extending upward in the screenshot are from the side anchor points.)



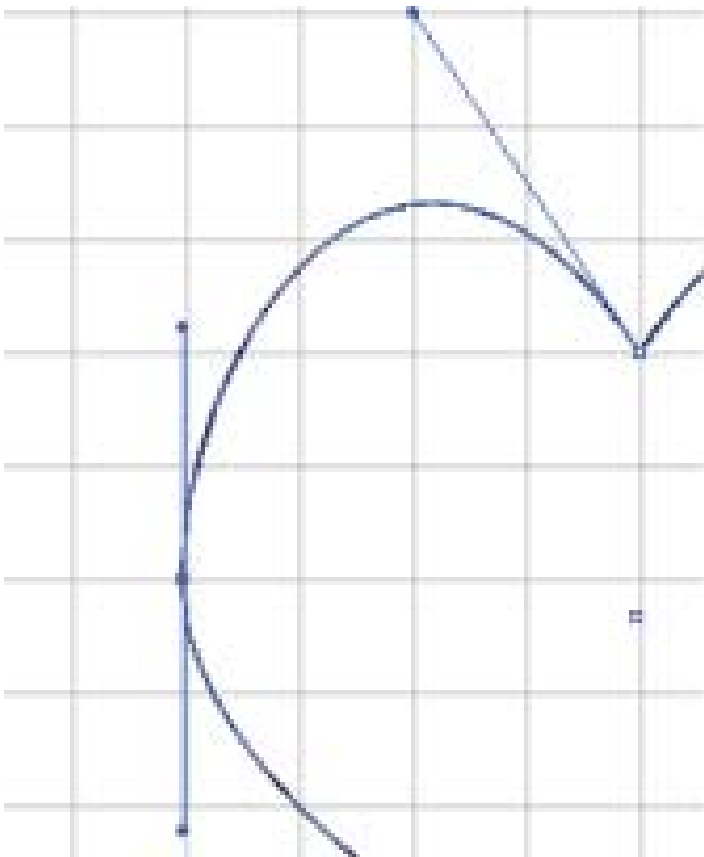
**Step 6.** Hold the option key (Mac) or alt key (Win) and grab the right handle of the top anchor point and drag it upward three squares. Holding the option or alt key lets you turn this anchor point into a corner point with two handles that move independently of each other. Because Snap to Grid is on it will "snap" to the intersection of the grid.



**Step 7.** Use the Direct Selection tool (A) to drag the left handle up three squares. You should have something similar to this at this point.

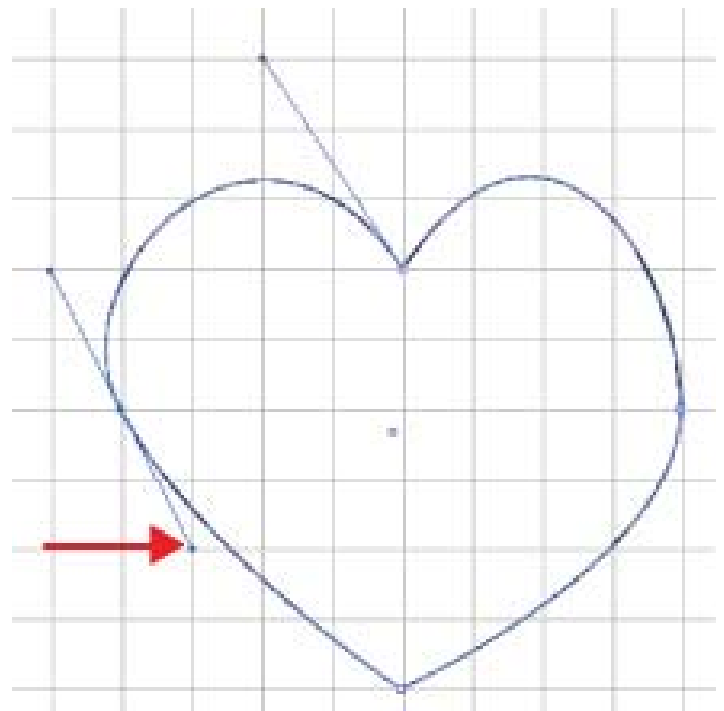


**Step 8.** Click the left anchor point with the direct selection tool so you can see the handles extending up and down from the point.

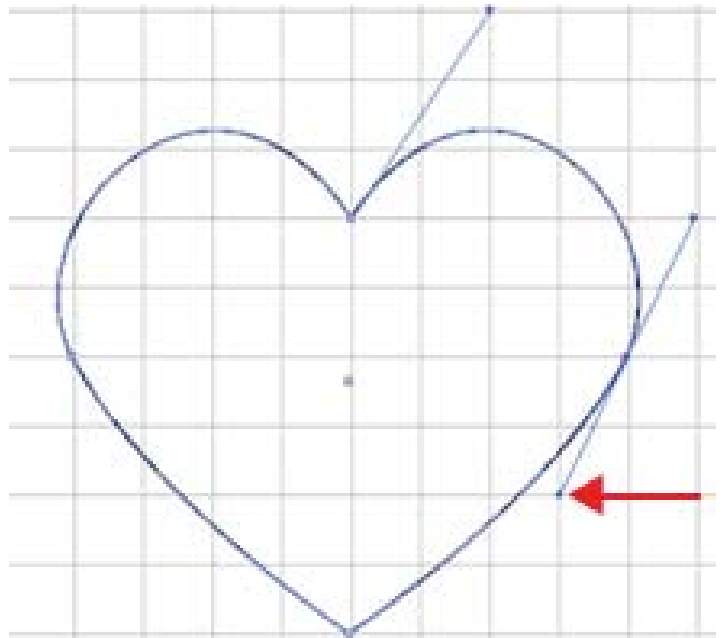


**Step 9.** Click the bottom handle of the left anchor point and drag it right to-

ward the heart one square to reshape the bottom of the heart.



**Step 10.** Click the right anchor point with the Direct Selection tool to show both anchor points. Click the bottom handle of the right anchor point and drag it left toward the heart one square. Save the file.



**Step 11.** Go to Window > Stroke to open the Stroke palette. Change the stroke to 15. Choose another stroke color if you wish. Now go to Object > Path > Outline Stroke.



**Step 12.** Duplicate the heart by holding the option key on the mac or alt key in windows and dragging away from the heart, then release the mouse to drop the new heart on the artboard. Now you should have two hearts. Turn off Snap to Grid (View > Snap to Grid) so you can move the hearts freely without the snap. Position them so they overlap, and give the second heart a different fill color. Notice that before we changed the color of the heart by changing the stroke color, and this time I told you to change the fill color. That's because when we outlined the stroke, we turned the heart into an object.



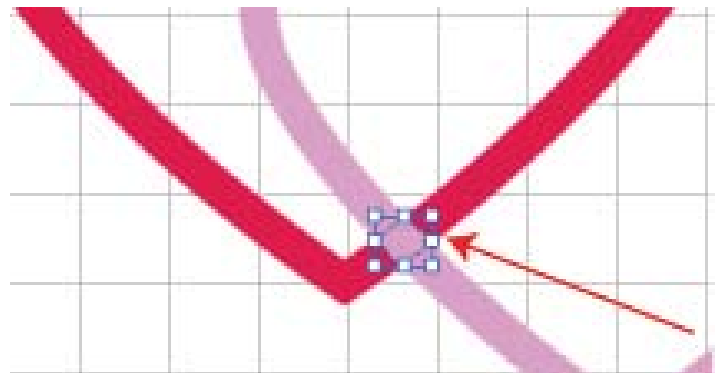
**Step 13.** Click one heart, hold the shift key and click on the second heart so

both are selected and open the Pathfinder palette (Window > Pathfinder). Click the Divide button. This will make separate pieces of the hearts wherever they overlap.



**Step 14.** Ungroup the hearts (Object > Ungroup).

**Step 15.** Use the Selection Tool (V) to select the part of the top heart you want to go behind the back one. I decided to link them at the bottom, so I selected the small area of the pink heart where it overlaps the red one.



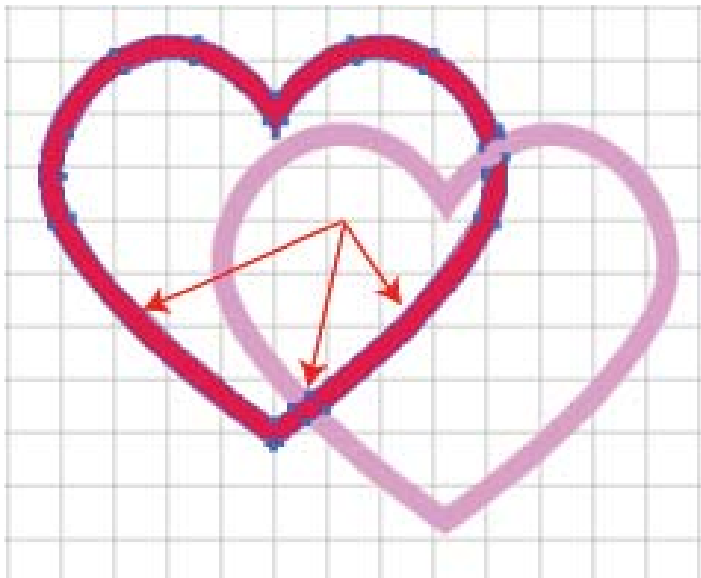
**Step 16.** Change the color of the selected object's fill to the same color as the back heart. Now it looks like the hearts are interlocking. We could stop now, but we won't!



**Step 17.** Click one part of the back heart, hold the shift key, and click the other two heart pieces that are the same color. You will have three pieces selected, two large heart pieces and the third is the small piece that we changed the color of before. Group them (Object > Group). Select the three parts of the second heart and group them as well.



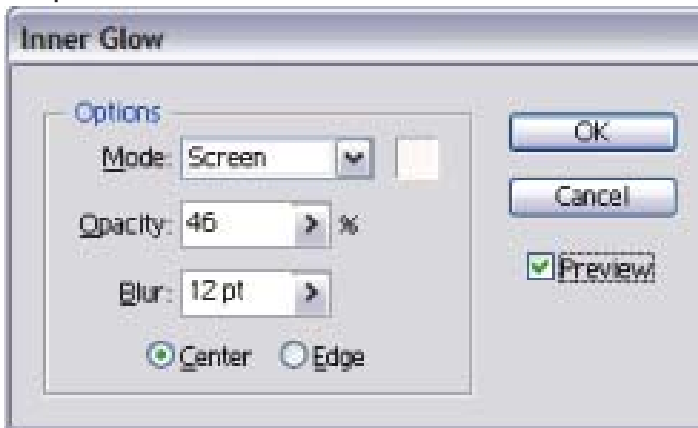
**Step 19.** Click once on the second heart to select it (or technically its group) and apply an Inner Glow with the same settings, except change the color to a darker shade of the second heart's color.



**Step 18.** Click once on the back heart to select it. Go to Effect > Stylize > Inner Glow so we can add some shading to give it some dimension. Change the mode to Multiply and the color to a darker shade of your heart color. I left the opacity at 75%, and set the Blur to 6 pixels. Make sure you check the Preview box so you can see the effect on the heart while you experiment with the settings. Click OK when finished to apply the glow.

## Now let's look at some variations.

On step 11, make the stroke thicker. This one is 30 pt. Go to Object > Path > Outline Stroke and then continue with steps 12 through 17. On step 18, here are some alternate settings for the Inner Glow. Follow step 19 to finish.



## Using Graphic Styles

Graphic Styles are preset fills and/or strokes you apply from the Graphic Styles palette with one click. Simply select the heart, and click on a style in the palette to apply it. These hearts have various graphic styles applied. Click [here](#) to download a zip file of the styles used on these hearts. These were created in Illustrator CS for windows. They do not work in earlier versions of Illustrator and have not been tested in Illustrator CS for Mac.



## Fills and Strokes

Instead of interlocking the hearts they can be filled or stroked. The one below used a floral brush on the stroke.

northlite\_hearts.ai and double click on the file to load the styles for use in Illustrator.

These also use graphic styles but have Symbols added. Open your symbols palette from Window > Symbols. You can load other symbols from the Symbols Palette options menu. Drag the symbol from the palette to the heart with the selection tool (V) and re-size by dragging the bounding box.



There you go! I am sure you can think of a lot of ideas to use your new heart shape.