

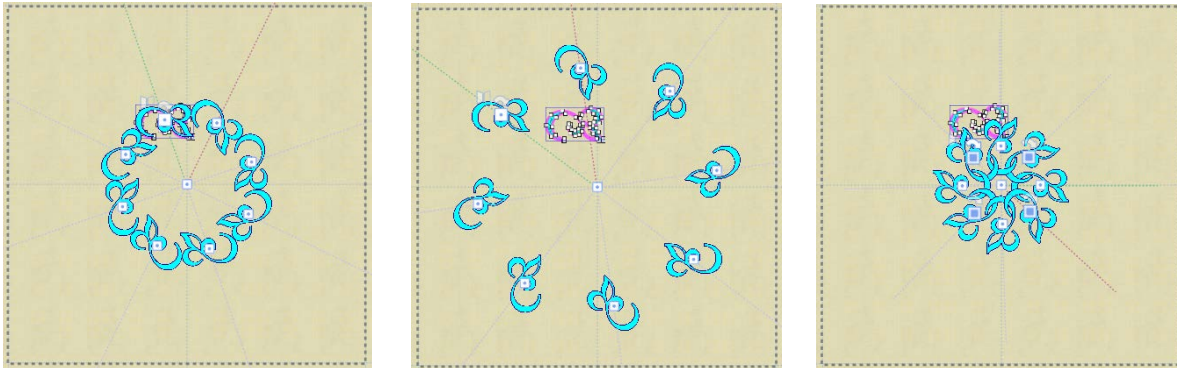


EXERCISE 3 – Rectangular and/or Circular Arrays

Circular Array

1. File > New > New Graphic > Hoop SQ(200 x 200) > Next > Cotton 2 > Finish
2. Tools > Insert Symbol > Scroll down and select >  Insert.
3. Put cursor up in left hand part of hoop > Left click and drag to create design > While still holding left click down drag and swing design to position 3.14 cm and 0.0°. X out of symbols. 
4. Select **Rectangular/Circular Array** > This tool has an arrow in the bottom right hand corner. That means this tool has multiple functions. If you don't see the Circular array, click and drag your mouse to the right and select the circular array.
Step Angle - 45.0 > Step Count – 8 > Make sure **Clone objects if possible** is checked.
When the clone objects option is checked you can change all the objects at once by simply reshaping only one of them. This option can save a lot of time and help you create unique designs. Any transformation you make is applied to all of the like designs immediately.
5. Put cursor on white box located on upper left of design. Notice the dotted lines that appear.



6. Left click and drag the design. You can create any design you choose simply by moving the shapes closer or farther apart.

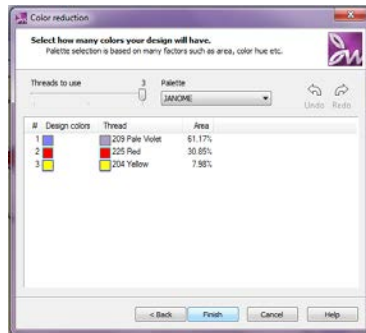
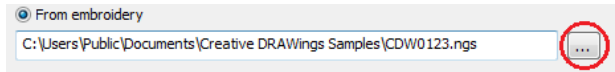
Notice there is a white square box with a green control dotted line and a white square box with a red control dotted line. Put your cursor on these boxes and notice what each one does. The green line is on the first design and controls the movement of the pieces. The red line is on the last design and controls the angle between the pieces. Also notice the white boxes on each individual design. Click on one of these and you can rotate each piece separately.

If you have clone objects checked any change you make will affect each like design. To change each one independently un-check the clone objects box.

7. When you have the design the way you want it click **Apply circular array**.
8. To Save the Design > File > Save As > Create a folder to save your designs in > Name your design and Save. *It is recommended to always save the working file as a .draw file and as a separate .jef file when you are ready to send it to the machine to stitch it out.*

Rectangular Array

1. File > New > From embroidery > Click on browse > Creative DRAWings Samples > CDW0093.ngs > Hoop SQ(200 x 200) > Next > Cotton 2 > Next
2. The next box shows the thread colors in the design. You can leave at the selected number or reduce the number of colors by moving the slider bar to the left. Under **Palette**, the drop down menu has multiple choices of thread brands for you to select. Leave the **Threads to use** at 3 and the **Palette** at Janome > Finish



3. Edit > Select all > Tool Options > Width 167.80mm > Make sure Proportional box is checked > Click off design to register changes > Select design again > Put cursor over center of design and cursor turns into arrows to move design > Use arrow keys on keyboard to move design to upper portion of hoop.
4. Select **Rectangular Array** > Horizontal copies – 1 > Vertical copies – 4
5. Use the bottom control point (white box) to move the design farther apart or closer together. Click > **Apply rectangular array** > Click outside of design to deselect.
6. File > Save As > Choose folder to save design in > Name design and Save as .jef

