A Sampling of Images from the Double Jump Model

Given the scope of images available in the traditional string art model based on a single repeated jump pattern, it is not surprising that we are only able to scratch the surface of possible images once repeated sets of multiple jumps are allowed to create the vertex frame. As a result, do not consider the twelve images on the next page to provide anywhere near an exhaustive list. They should be viewed as more suggestive in nature. Nonetheless, there were reasons why these images made the cut, and those reasons are noted below.

In the notes below, *FCLD* is *Fixed Count Line Drawing* mode, *SLD* is *Single Line Drawing* mode, and *DL* is *Drawn Lines*.

Why these images were included.

Row 1   *The images in Rows 1-3 can be created with Version 1 Excel file as well as with the web model.*

Left   This is 1 larger **S** but uses same **n** and jumps as was used in kicking the tires. Note that the inward pointing lines are not part of the vertex frame but are between vertices

Center   Interesting that seemingly 3 lines end at internal points rather than 4 or 2.

Right   Although this is a porcupine (**P** = 92 is a single line) the sharp inward pointing needles are interesting.

Row 2   Left   The swirling chopsticks are even tighter than the version shown in kicking the tires.

Center   This very Escher-like *running in circles* is interesting to watch get drawn using *DL* = 11 in *FCLD* mode because a single cycle does not reveal the pattern. Compare with *DL = 9* or this one with *DL = 13*.

Right   This sun-like image with border looks like dealing cards if you set *DL = 6* in *FCLD* mode. *How would you get the image to deal counterclockwise?*

Row 3   Left   This image is either trying to turn into a pentagon or trying to break up a pentagon, you decide.

Center   One might imagine this as 14 fountain pens or perhaps sharply manicured fingernails?

Right   This image appears to have sparks coming off of the star. Of greater import is that it is the unchecked version of the image just beneath it (note that the labels are the same). To learn more, see Row 4 notes.

Row 4   *The images in Row 4 are from the Version 2 of the Double Jump Excel file with click box checked on so that the last half of the lines are counted counterclockwise. **These images are only available in Excel.***

Left   This porcupine image occurs by changing **J₁** from 2 to 1 from the image at mid-page of the *explainer* just noted. Note that both images appear to create "static."

Center   This surprising image occurred because **J₂** was manually changed from =**n**/2 (of 9) to another value, 12. Unfortunately, different numbers do not provide additional letters of the alphabet!

Right   The image has the same counting structure as the image just above it except the last half of the lines were counted backwards.

Here are links to a few more images that did not make the cut.

Change **P** in Row 1 Left to 25 yields 24 inward pointing carrots. This is another example of the notion from kicking the tires. If you start with an interesting image and change something, you find other interesting images (like the next one).

By setting *DL* = 11 you and use *FCLD* mode, you find 4 shape-shifting quadrangles similar to 3 Shape-Shifting Δs. If you have trouble seeing the similarity, *Pause* the *SLD* at *Drawing progress* = 43 that spans the 1ˢᵗ jump from vertex 2 to vertex 17 with *Toggle Vertices* turned on. The 11-line string starts at vertex 2 and ends ¼ of the way toward vertex 17.

A 22 unit housing complex at Flower Circle (to understand title, use *FCLD* mode). Here are 18 units somewhere else.

Note the small inward pointing lines at each vertex. The only difference now is that **P** = 37.

This is like a triangular version of the Row 3 Left pentagon. The same question still applies.

This six point star seems to be a bit out of kilter.

This Sunburst that remains internal rather than all the way to the vertices.

(24,4,29,J(2,15))　(7,4,3,J(1,3))　(23,4,91,J(1,11))

(18,5,14,J(4,9))　(14,11,142,J(6,7))　(24,3,13,J(14,23))

(10,3,8,J(2,5))　(14,12,123,J(4,7))　(10,12,104,J(4,5))

(6,30,179,J(1,3))　(18,18,12,J(5,12))　(10,12,104,J(4,5))