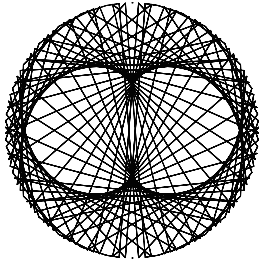
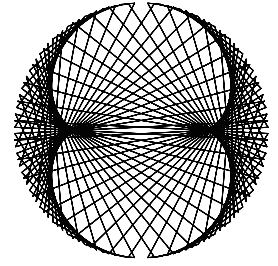


Mirrored Cardioids



Both top images have the same n and two cusps but are very different from one another. The one on the right is the standard $k = 3$ variety in which each cusp is created by "half" the circle with tails that do not overlap. By contrast, each cusp on the left takes the "whole" circle. Such images occur when $n = 2k - 4$, and $k = n/2 + 2$; the image appears to have two cardioids with one turned upside down from the other.



The images below show the comparison for $n = 74$ of $k = 2$ with $k = 39$. Each even vertex in the upper image (except the top) is part of a single 36-vertex loop shown in red. Each odd vertex is a string that leads to an even vertex. The bottom image has TWO 36-vertex loops: red even and blue odd. Note that in this comparison, the red loops are IDENTICAL in top and bottom images. The top loop starts from 2 to 4 = 2·2 and the bottom also starts from 2 to 4 = MOD(2·39, 74).

