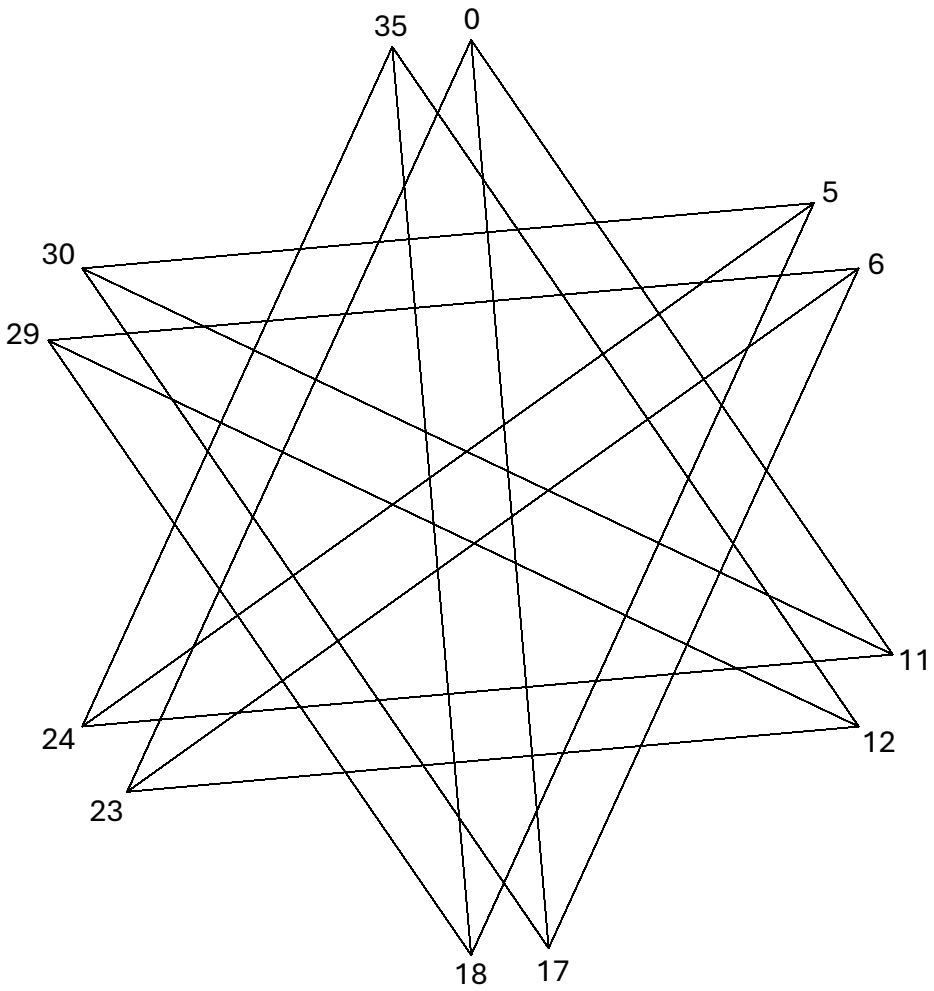
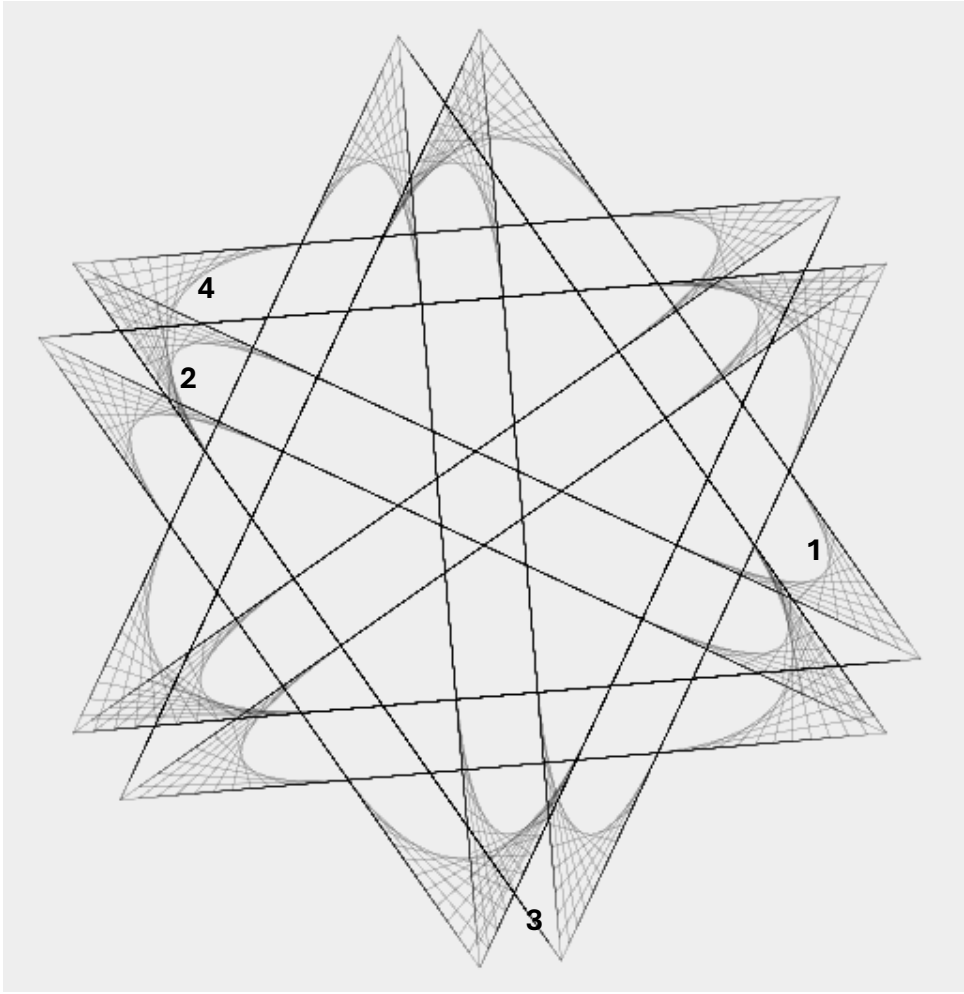
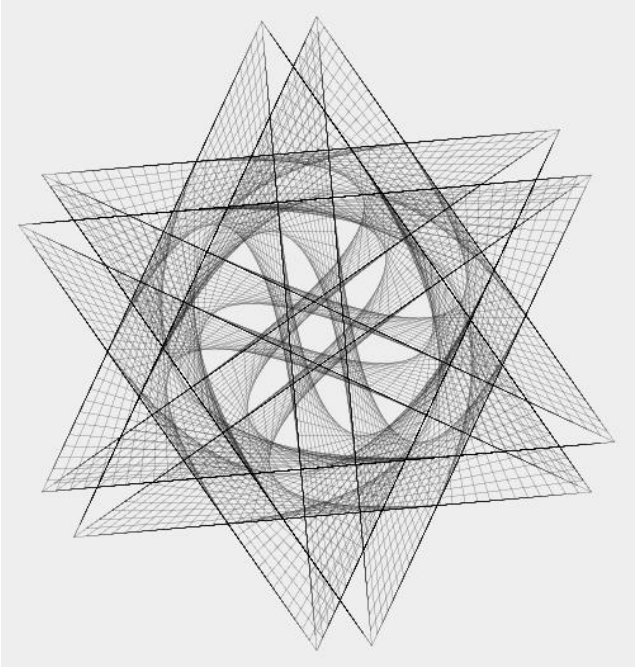
Intertwined 6,2-Stars

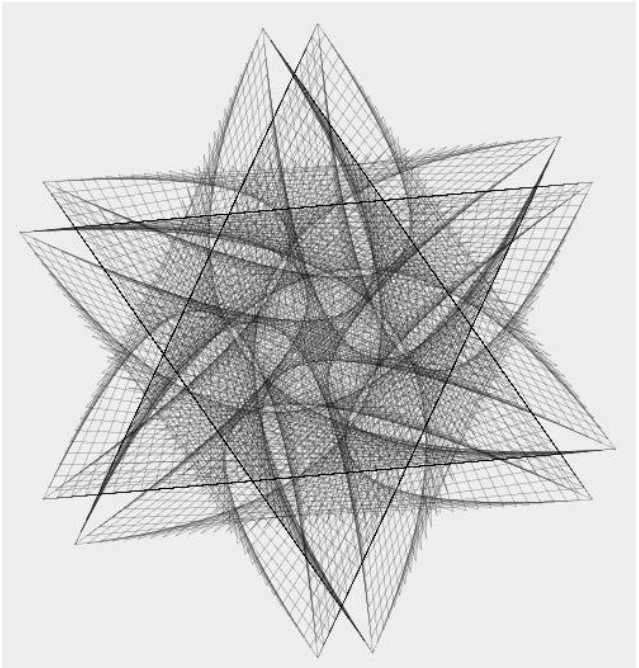
The VF given the four jump set pattern of J(11,19,23,13) with ***n*** = 36 is shown at left. All angles produced are multiples of 30° so that the images are perfect 6,2-stars unlike those examined in E12.3. The image has 60° rotational symmetry and the first five lines of the VF connect vertices 0, 11, 30, 17, 30, 5. These lines produce an angle set of 30°, 30°. 0°, 60° at vertices at 11, 30, 17, and 30, respectively. These first four angles have been labelled in the curve-tip star image to the right as **1**, **2**, **3**, and **4** (based on ***S*** = 41 and ***P*** = 13). If you follow this angle set pattern, the third angle in the set is always 0° and it emanates from the vertex that is just under a multiple of 6 (the 0° vertex order is 17, 11, 5, 35, 29, 23). The second set of four jumps starts at vertex 30, the third at 24, fourth at 18, fifth at 12 and sixth at 6. Each of the 12 used vertices is used twice in creating the final image (used vertices = ***k·n***/VCF = 4·36/6 = 24).

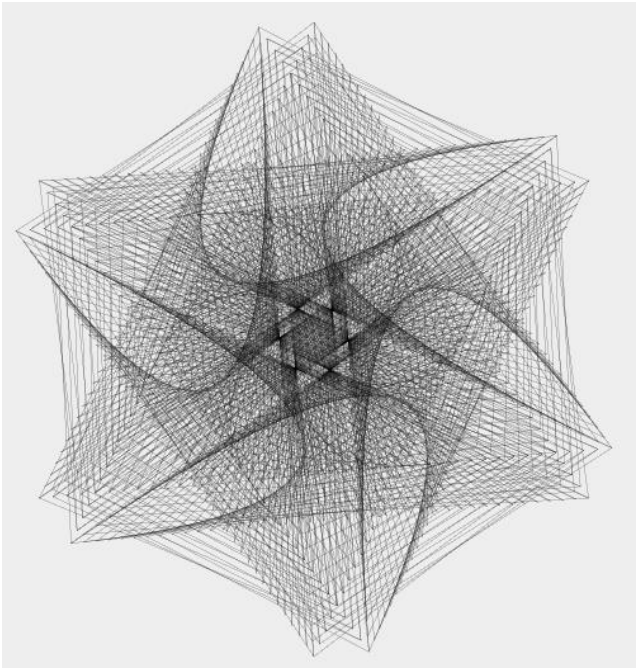
The images on the next page show 6 of the hundreds of full density (SCF = 1, 984 line) images obtained by clicking **Play Sequence** using the above link. They were chosen so you can see that the swirl direction changes as ***P*** changes. Bottom right is the porcupine image in this situation.











P values: 31 top 253 bottom

43 top 419 bottom

125 top 491 bottom