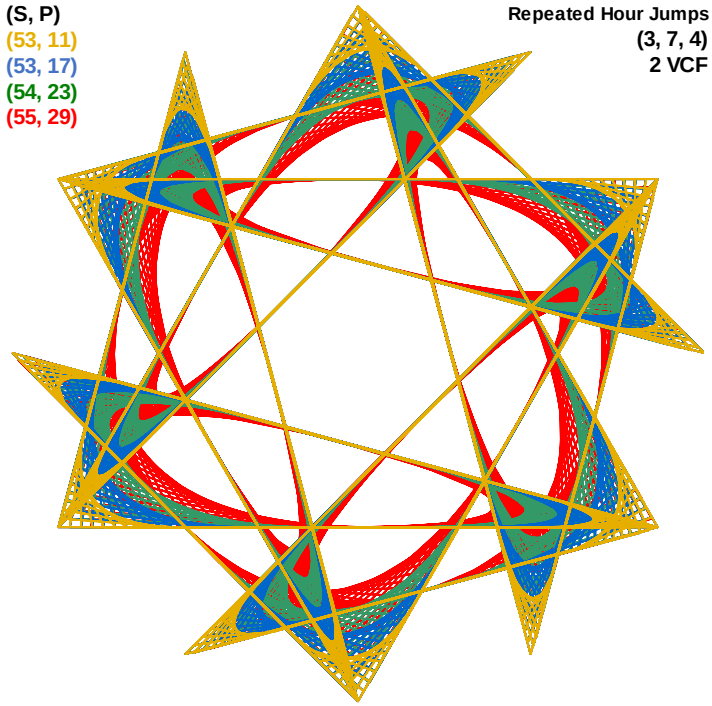
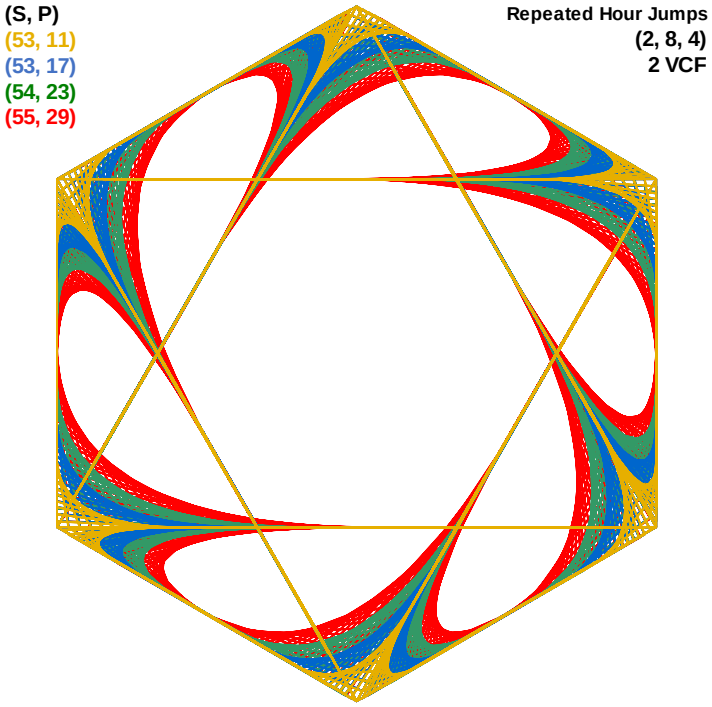
Triple Jumps with VCF > 1

When VCF > 1 the VF uses 3***n***/VCF = 36/VCF vertices so that some vertices may not be used, and others may be used less than 3 times. The smallest decline in vertices occurs when VCF = 2, in which case 18 vertices are used. One can see this as 12 vertices with half used twice at left (where even vertices are used twice and odd are used once) or as 6 vertices used 3 times each as at right. The right image requires additional explanation as it appears that each used vertex is only used twice. Were that true, it would be a double jump image, but by following the jump cycle you see that each is used three times. The first 3 jump sets are **2**-10-**2** – 4-0-4 – 6-**2**-6 …. Notice that 2 has been used three times, not twice.





The other VCF possibilities are 3, 4, 6, and 12 so vertices used are 12, 9, 6, and 3 as shown by column below. And just like above, this can be accomplished by using some vertices more than once (top row) or one time each (bottom), except for the triangles in the 4th column. Note the ***N*** in the upper row uses six vertices, not four as vertices 0 and 6 are used twice.