

Understanding the Vertex Jump Pattern for File 3, Center-Point Flowers

Unlike other files in **PART I of PWP**, each jump from vertex to vertex is immediately followed by a jump to the center and a jump back out to the newly acquired vertex.

To be explicit, consider $n = 3$ and the vertices are labelled as usual, clockwise around the circle starting at 0 (& 3) at the top. Call the center **C**. The order of vertices required to complete a circuit is thus:

0 to 1 to C to 1 to 2 to C to 2 to 3 to C to 3

There are three things to note about this situation:

- 1) The circuit is completed after $3 \cdot n$ jumps rather than n jumps. There are n jumps to go around the circle, n jumps to the center, and n jumps from the center back to the vertex on the circle.
- 2) The circuit is **NOT** complete as soon as $n \& 0$ is attained (3 in the sequence above). The circuit is complete once we jump to the center and back to $n \& 0$.
- 3) Jumps between polygonal vertices is fixed at 1 in this file.

