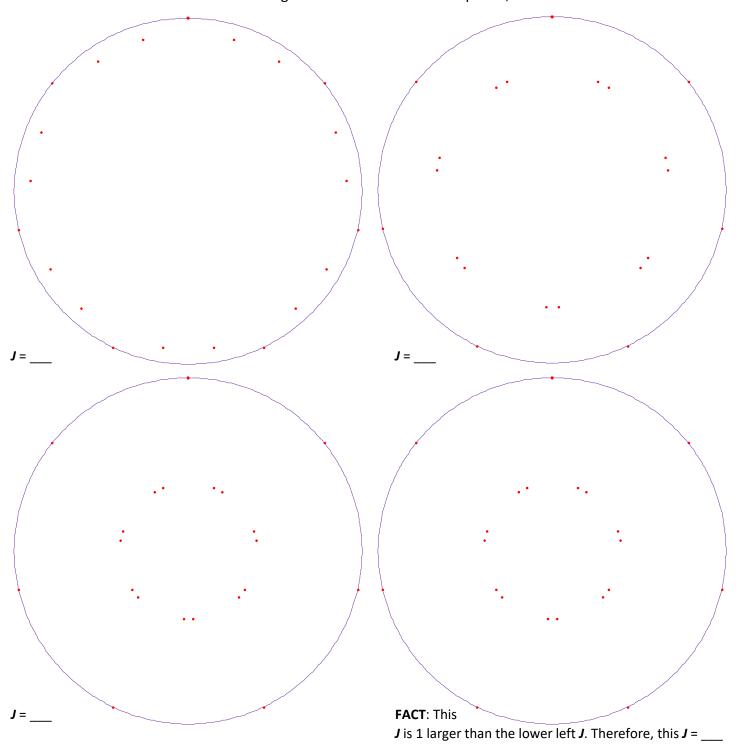
Pencil and Ruler Exercise: Varying J (polygonal vertex jumps)

for fixed *n* (vertices in polygon), *S* (subdivisions between vertices) and *P* (subdivisions between points)

FACT: All four subdivision dot-plots have the same number of n, $n = ____$, and the same number for S, $S = ____$.

Drawing Instructions: Start at the top of each circle and *draw each image from point to point* with pencil and ruler assuming **two** subdivisions between points, **P** = **2**.



Briefly explain how the two lower images differ from one another. ____

Does this help you see why you only need to think about jumps where J < n/2 if all you care about is finding distinct images? The only difference in this instance is the way that the image *appears* to be created in moving around the vertex frame. One version appears to be drawn in a clockwise fashion the other appears to be drawn counterclockwise.