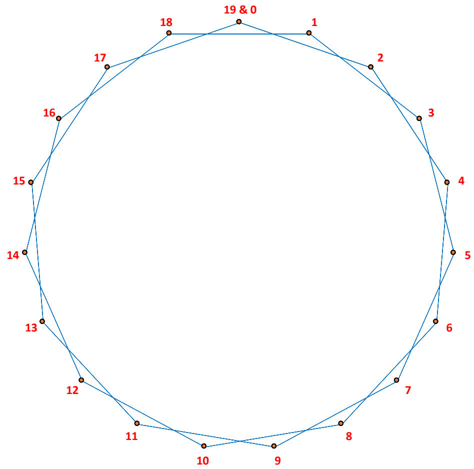

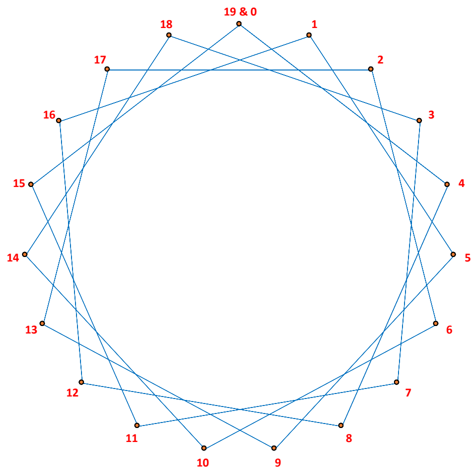

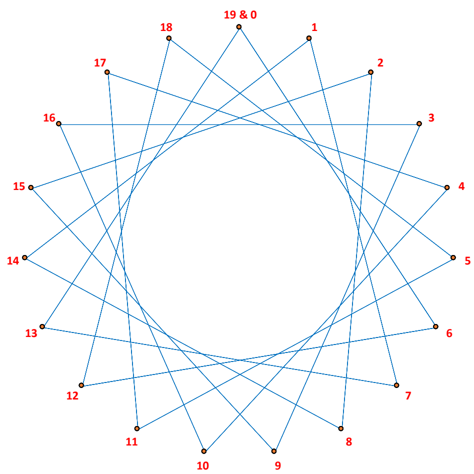

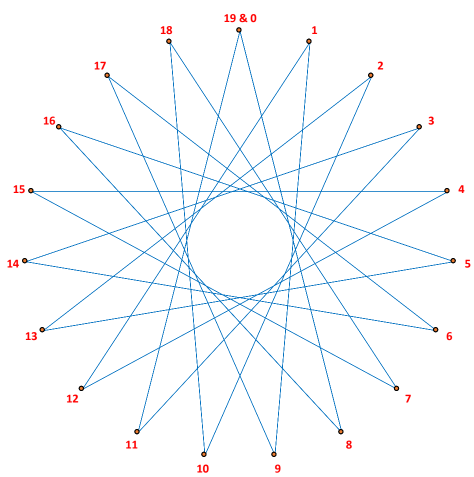

Drawing the Vertex Frame

When 1 < ***J*** < ***n***-1 and VCF = 1 a star results. This star is the VF for string art images and the order in which VF lines are drawn determines subdivision point order and hence line placement in the final image.

These 8 images show all possible 19-point stars. Each star can be drawn two ways depending on whether ***J*** < ***n***/2 or ***J*** > ***n***/2.

The order in which the MIN(***J***,***n***-***J***)-1 ending vertices fill in the vertices between ***n***&0 and ***J*** or ***n***&0 and ***n***-***J*** is noted below. These values are based on the equations provided at the bottom of the table.

Two notes: 1) The order in which vertices are filled in is not necessarily sequential (see 3R or 4L). **2)** When ***J*** > ***n***/2, the ending vertex order can be viewed as negative of its ***n***-***J*** counterpart (***E***-***n***).

This same strategy works for other ***n*** and ***J*** values if VCF = GCD(***n***,***J***) = 1.

Order in which VF is Filled In							***n*** =	19	
Row	Times around ***ending vertex*** (***T***<MIN(***J***,***n***-***J***))								
Side	***J*** \ ***T***	1	2	3	4	5	6	7	8
1L	2	1							
	17	18							
	E-***n***	-1							
1R	3	2	1						
	16	17	18						
	E-***n***	-2	-1						
2L	4	1	2	3					
	15	18	17	16					
	E-***n***	-1	-2	-3					
2R	5	1	2	3	4				
	14	18	17	16	15				
	E-***n***	-1	-2	-3	-4				
3L	6	5	4	3	2	1			
	13	14	15	16	17	18			
	E-***n***	-5	-4	-3	-2	-1			
3R	7	2	4	6	1	3	5		
	12	17	15	13	18	16	14		
	E-***n***	-2	-4	-6	-1	-3	-5		
4L	8	5	2	7	4	1	6	3	
	11	14	17	12	15	18	13	16	
	E-***n***	-5	-2	-7	-4	-1	-6	-3	
4R	9	8	7	6	5	4	3	2	1
	10	11	12	13	14	15	16	17	18
	E-***n***	-8	-7	-6	-5	-4	-3	-2	-1
J < ***n***/2 eq.		MOD((INT(***T*******n***/***J***)+1)****J***,***n***)							
J > ***n***/2 eq.		MOD((INT(***T*******n***/(***n***-***J***))+1)****J***,***n***)