11. Centered Regular Polygons and Stars B

The image below is a $n = k^2 - 1$ CRPS image with $k = 20$ and therefore $n = 399$. Initial inspection suggest that the image is complete but in fact there is a single missing line. This is because the cardioid files create lines one at a time with up to 360 lines possible, one starting at each of the first 360 vertices.

1. What line is missing? Answer this by reference to the paired vertices which are the endpoints of the missing line. The missing line includes the following two vertices: lower numbered vertex _____ higher _____

2. How many lines are in the image? N_{lines} = _____.

3. How many CRP and CRS are in the image? N_{CRP} = _____. $NCRS$ = _____.

399 n polygon vertices   **20** k, Multiplier