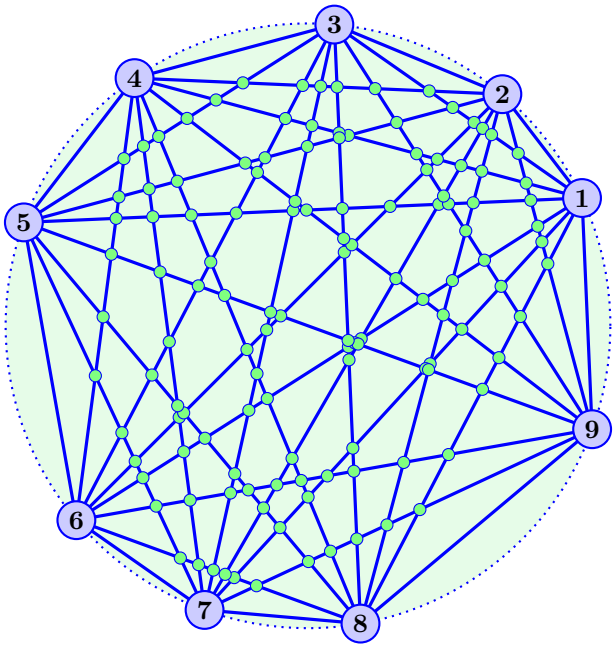
Consider n randomly placed points on a circle.

1. The complete graph on the n points has $\binom{n}{2}$ edges.
2. Each pair of edges yields an intersection point and there are (at most) $\binom{n}{4}$ such points.



Number of generated intersection points : 126