4 points ⇒ 6 intersections = 2*C(4,4) + 4 = 6
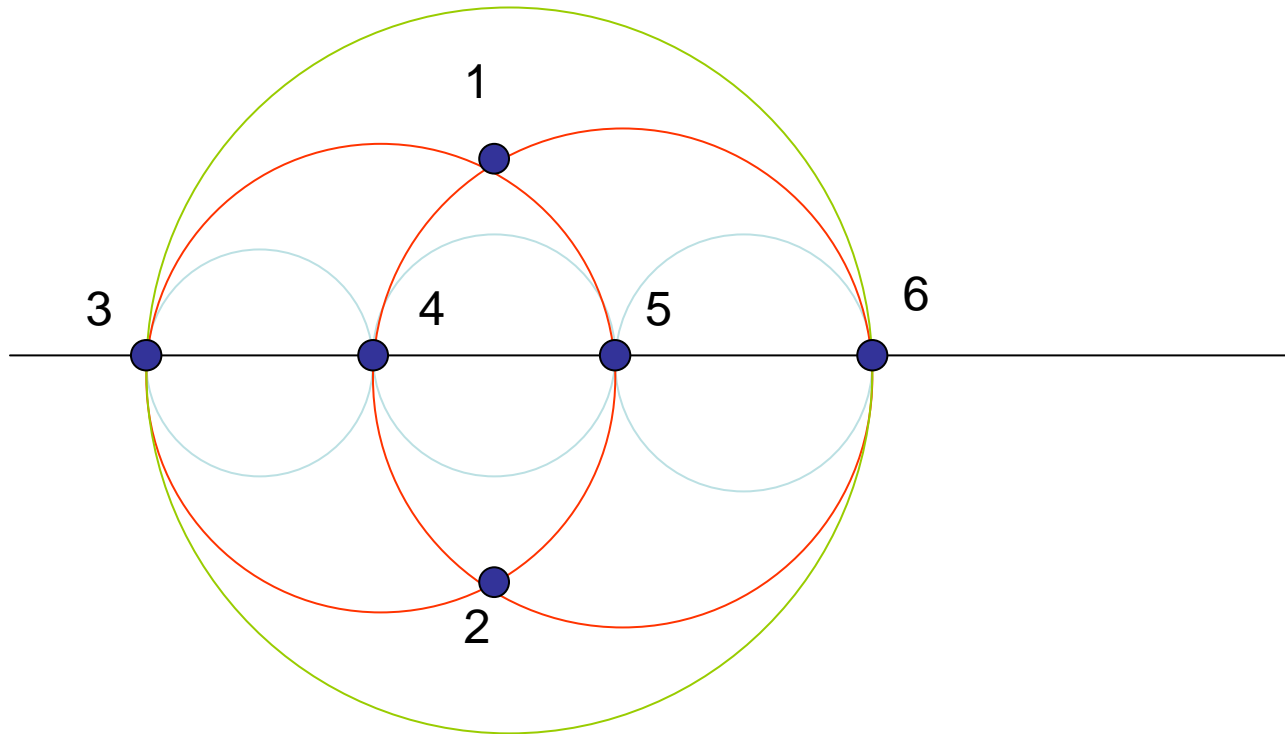
5 points $\Rightarrow$ 15 intersections = 2*C(5,4) + 5
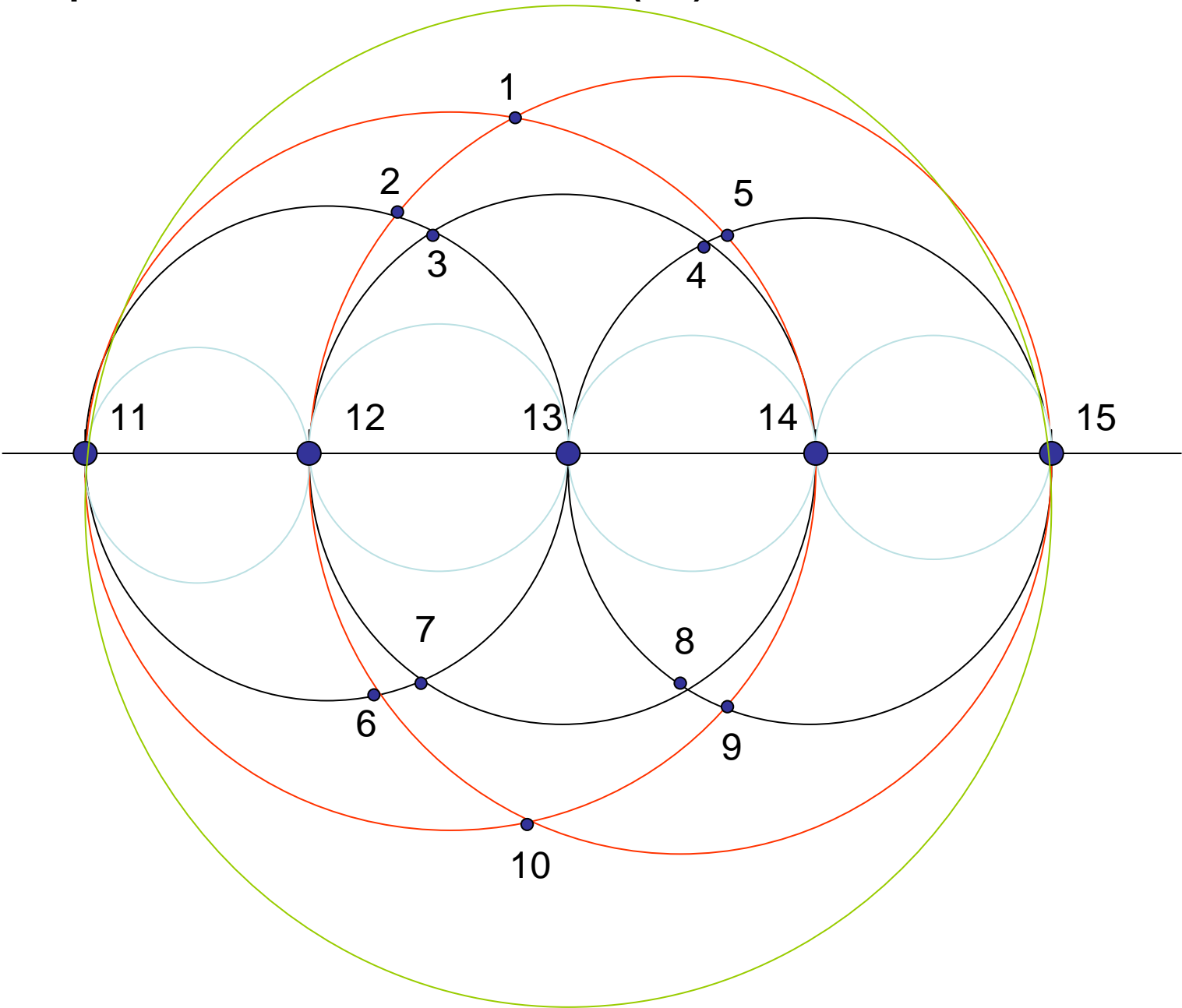
6 points ⟹ 36 intersections =
2*C(6,4) + 6