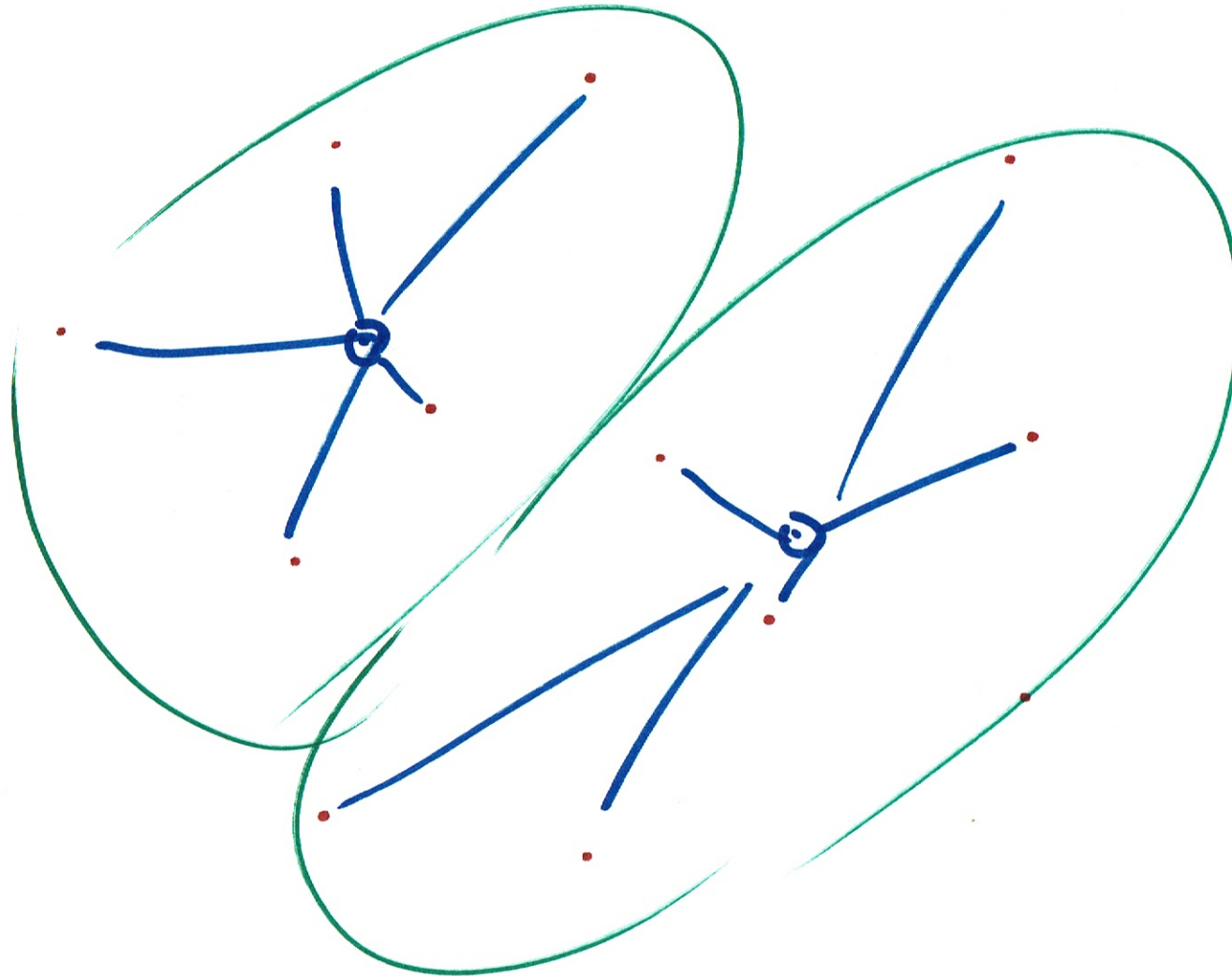


K

$$\frac{n(n+1)}{2}$$



# Centroid based: K-Means Clustering

- K-Means is probably the most used clustering technique
- Aims to partition the n observations into k clusters so as to minimize the within-cluster sum of squares (i.e. variance). }
- Computationally less expensive compared to hierarchical techniques.
- Have to pre-define K, the no of clusters

$$\frac{\sum (\bar{x} - x_i)^2}{n}$$

$K=3$

