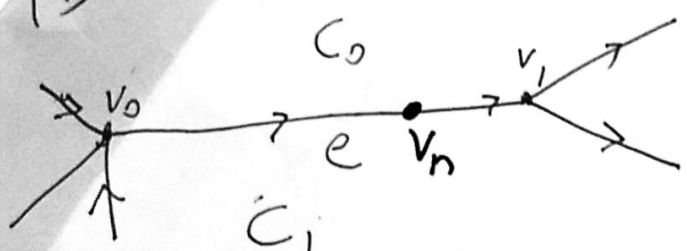
CELL HAS
EDGE LIST [E]
VERTEX LIST [P] SUPERFLUOUS
SITE (P)

EDGE HAS ENDPOINTS (P) (P)
BELONGS TO C, C NOT SUPERFLUOUS
VERTEX BELONGS TO E E at least 3 edges
C at least 3 cells SUPERFLUOUS

DIVIDE AN EDGE:



1. Adjust endpoints of old edge $v_0 v_1 \rightarrow v_0 v_n$
2. Add new edge e_n endpoints $v_n v_1$
3. Insert new edge e_n into two cells after e
4. Adjust edge lists of 3 vertices:
   v_n: e, e_n
   v_0: NO CHANGE
   v_1: remove e, add e_n

delete a Vertex