GRAPH TO BE DRAWN:

$$G = (V, E)$$

POINTS IN PLANE ⤴ ⤴ LINE SEGMENTS TO BE DRAWN

GRAPH TRACED BY PEN MOVEMENTS

$$G' = (V, E') \qquad E \subseteq E'$$

NOTE: ALL DEGREES IN G' ARE EVEN

GRAPH TRACED BY PEN WHEN IN UP POSITION

I.E. WASTED PEN MOVEMENT

$$G'' = (V, E'') \qquad E'' = E' \setminus E$$

$$\text{DEGREE}_{G''}(v) \equiv \text{DEGREE}_{G}(v) \quad (\text{MODULO 2})$$

IF WE WISH TO MINIMIZE WASTED
PEN MOVEMENT, THEN E'' IS A
PERFECT MATCHING ON THE ODD
DEGREE VERTICES OF G.