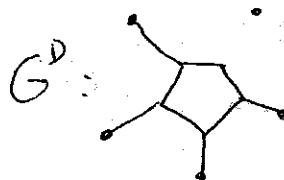
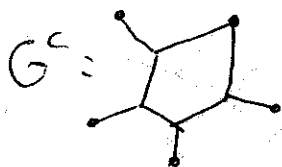
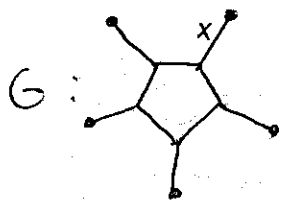


boundary spike again:



$$\Delta(G) = \Delta(G^c) \begin{bmatrix} \frac{x}{x+\Sigma} & \frac{\Delta_{12}}{x+\Sigma} & \dots & \frac{\Delta_{1n}}{x+\Sigma} \\ & 1 & & 0 \\ & 0 & \ddots & \\ & & & 1 \end{bmatrix}, \quad \Sigma = \Delta_{12} + \dots + \Delta_{1n} = -\Delta_{11}$$

(League of Opposite Signs)

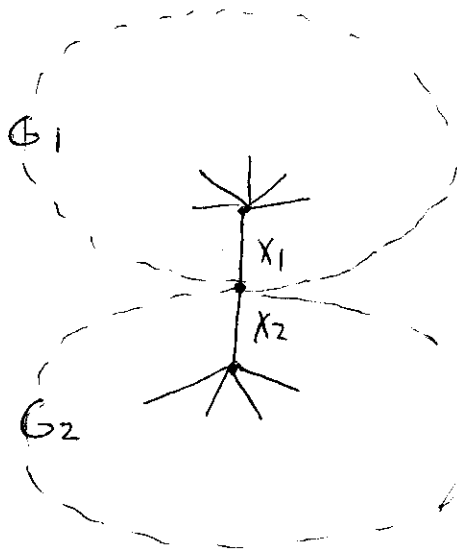
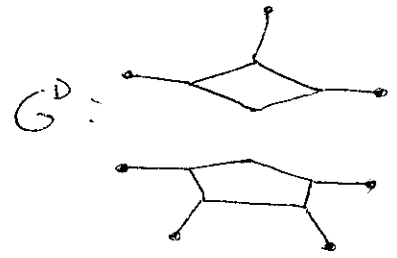
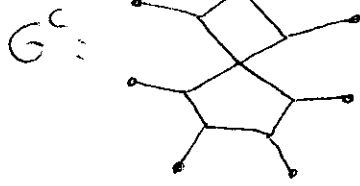
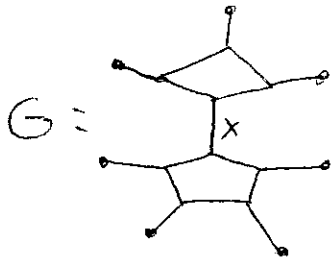
$$= \Delta(G^c) \begin{bmatrix} \frac{x}{x+\Sigma} & & & \\ & \frac{x}{x+\Sigma} & & \\ & & \ddots & \\ & & & \frac{x}{x+\Sigma} \end{bmatrix} + \Delta(G^D) \begin{bmatrix} 0 & \frac{\Delta_{12}}{x+\Sigma} & \dots & \frac{\Delta_{1n}}{x+\Sigma} \\ & \frac{\Sigma}{x+\Sigma} & & 0 \\ & & \ddots & \\ & & & \frac{\Sigma}{x+\Sigma} \end{bmatrix}$$

$$= \frac{x}{x+\Sigma} \Delta(G^c) + \frac{\Sigma}{x+\Sigma} \Delta(G^D)$$

$$\Rightarrow \Delta(G) = p \Delta(G^c) + q \Delta(G^D), \quad p+q=1$$

$$p = \frac{x}{x+\Sigma}$$

single connection =



$$\rightarrow P_1 = \frac{x_1}{x_1 + \Sigma(G_1)}$$

$$\Rightarrow \text{want } \begin{cases} \frac{1}{x_1} + \frac{1}{x_2} = \frac{1}{x} \\ P_1 = P_2 \end{cases}$$

$$\rightarrow P_2 = \frac{x_2}{x_2 + \Sigma(G_2)}$$

$$\Rightarrow \Lambda(G) = p \Lambda(G^c) + q \Lambda(G^D), \quad p + q = 1$$

$$\left(p = \frac{x(\Sigma(G_1) + \Sigma(G_2))}{\Sigma(G_1)\Sigma(G_2) + x(\Sigma(G_1) + \Sigma(G_2))} \right)$$

geometric view:

(response matrix space)

