

$$TFN_i = \sum_{\substack{j=1 \\ j \neq i}}^n x_{ij}$$

$$TFP_i = \sum_{\substack{j=1 \\ j \neq i}}^n x_{ji}$$

$$TTN_i = \sum_{\substack{j=1 \\ j \neq i}}^n \sum_{\substack{k=1 \\ k \neq i}}^n x_{jk}$$

$$TTP_{all} = \sum_{j=1}^n x_{jj}$$