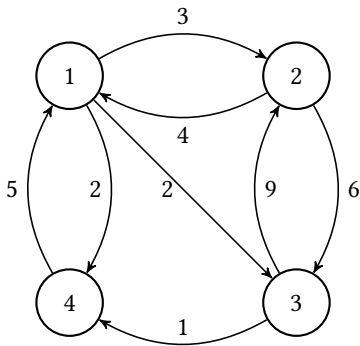


## b) Continuous-time Markov Chain



$$\Gamma_{ii} = \sum_{j \neq i} -\Gamma_{ij} \quad \rightarrow \quad \Gamma = \begin{pmatrix} -7 & 3 & 2 & 2 \\ 4 & -10 & 6 & 0 \\ 0 & 9 & 10 & 1 \\ 5 & 0 & 0 & -5 \end{pmatrix}$$