

$$\begin{aligned} \deg(c) &= 4 && \text{IF } i \text{ IS CONNECTED WITH } j \\ \deg(a) &= 1 && \text{WE WRITE } i \sim j \\ P(X_1 = j \mid X_0 = i) &= \begin{cases} \frac{1}{\deg(i)} & \text{if } j \sim i \\ 0 & \text{OTHERWISE} \end{cases} \end{aligned}$$

$$w(i, j) \text{ IS THE WEIGHT OF EDGE } i \sim j \quad w(i) = \sum_{j \sim i} w(i, j)$$

$$\text{THEN } P_{ij} = \begin{cases} \frac{w(i, j)}{w(i)} & i \sim j \\ 0 & \text{OTHERWISE} \end{cases}$$