

$$\begin{array}{c} \text{States} \end{array}
 \begin{array}{ccc} 1 & 2 & 3 \end{array}
 \begin{pmatrix}
 1/2 & 1/4 & 1/4 \\
 1/3 & 0 & 2/3 \\
 1/2 & 1/2 & 0
 \end{pmatrix}$$