$$\begin{bmatrix} 0 & 1 & 0 & 1 & \cdots \\ 1 & 0 & 1 & 0 & \cdots \\ 1 & 0 & 0 & 0 & \cdots \\ 0 & 1 & 0 & 0 & \cdots \\ \vdots & \vdots & \vdots & \vdots & \ddots \end{bmatrix} \times \begin{bmatrix} 0.5 \\ 1.2 \\ 0.8 \\ 0.3 \\ \vdots \end{bmatrix} = \begin{bmatrix} 1.5 \\ 1.3 \\ 0.5 \\ \vdots \end{bmatrix}$$