$$\boldsymbol{M} = \begin{pmatrix} 0.80 & 0.01 & 0.25 \\ 0.01 & 0.85 & 0.48 \\ 0.25 & 0.48 & 0.5 \end{pmatrix}$$

$$= \boldsymbol{V} \begin{pmatrix} 0.8 & 0 & 0 \\ 0 & 1.25 & 0 \\ 0 & 0 & 0.1 \end{pmatrix} \boldsymbol{V}^{\mathsf{T}}$$

$$\boldsymbol{x}_1 = \begin{pmatrix} -0.52 \\ -0.42 \\ 0.69 \end{pmatrix}$$

$$\boldsymbol{x}_3 = \begin{pmatrix} 0.62 \\ -0.6 \\ -0.03 \end{pmatrix}$$

$$\boldsymbol{x}_2 = \begin{pmatrix} -0.7 \\ 0.17 \\ -0.61 \end{pmatrix}$$