

Solution (#799) The points $(1, 0, 0)^T$ and $(0, 1, 0)^T$ are fixed. The point $(0, 0, 1)^T$ moves parallel to the $z = 0$ plane and so moves to $(d_1, d_2, 0)$ say. Thus the associated matrix for this shear is

$$\begin{pmatrix} 1 & 0 & d_1 \\ 0 & 1 & d_2 \\ 0 & 0 & 1 \end{pmatrix}.$$