

$$U[t_] := \text{MatrixExp}\left[t \begin{pmatrix} 0 & 1 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}\right];$$

$$V[s_] := \text{MatrixExp}\left[s \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 0 & 0 \end{pmatrix}\right]; \quad W[w_] := \text{MatrixExp}\left[w \begin{pmatrix} 0 & 0 & 1 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}\right]$$

MatrixForm /@ {U[t], V[s], W[w]}

$$\left\{ \begin{pmatrix} 1 & t & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & s \\ 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & w \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix} \right\}$$

U[t].V[s].U[-t].V[-s] // MatrixForm

$$\begin{pmatrix} 1 & 0 & s t \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$