

$$\begin{array}{|c|c|} \hline 0 & x \\ \hline x^T & 0 \\ \hline \end{array}
 =
 \begin{array}{|c|c|c|} \hline u & u & 0 \\ \hline v & -v & v_0 \\ \hline \end{array}
 =
 \begin{array}{|c|c|c|} \hline u & u & 0 \\ \hline v & -v & v_0 \\ \hline \end{array}
 =
 \begin{array}{|c|c|c|} \hline s & 0 & 0 \\ \hline 0 & -s & 0 \\ \hline 0 & 0 & 0 \\ \hline \end{array}$$