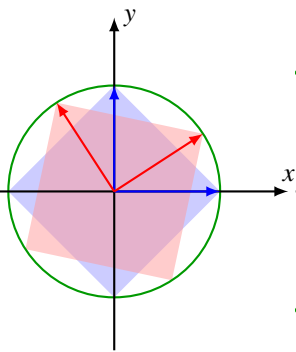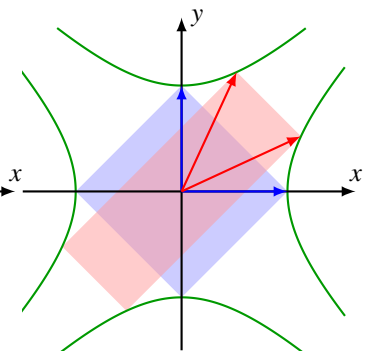$$A = \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$$

$$e^{At} = \begin{pmatrix} e^{t} & 0 \\ 0 & e^{-t} \end{pmatrix}$$

$$B = \begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix}$$

$$e^{Bt} = \begin{pmatrix} \cos t & -\sin t \\ \sin t & \cos t \end{pmatrix}$$

$$C = \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$$

$$e^{Ct} = \begin{pmatrix} \cosh t & \sinh t \\ \sinh t & \cosh t \end{pmatrix}$$