

$$\begin{array}{ccccccc}
 & \eta_X & & f \otimes \text{id}_X & & \text{br} & \\
 \mathbf{1} & \xrightarrow{\quad} & X \otimes X^\vee & \xrightarrow{\quad} & X \otimes X^\vee & \xrightarrow{\quad} & X \otimes X^\vee \xrightarrow{\epsilon_X} \mathbf{1}
 \end{array}$$