

$$\begin{array}{ccccccc}
 \text{id}_Y \otimes \eta_X & & f \otimes \text{id}_X & & \text{id}_Z \otimes \text{br} & & \text{id}_Z \otimes \epsilon_X \\
 Y & \xrightarrow{\quad} & Y \otimes X^\vee & \xrightarrow{\quad} & Z \otimes X^\vee & \xrightarrow{\quad} & Z \\
 & & \otimes X & & \otimes X & &
 \end{array}$$