

$$\begin{array}{ccccc}
 (X \otimes Y) \otimes Z & \xrightarrow{\text{br}_{X,Y} \otimes \text{Id}_Z} & (Y \otimes X) \otimes Z & \xrightarrow{\text{as}_{Y,X,Z}} & Y \otimes (X \otimes Z) \\
 \downarrow \text{as}_{X,Y,Z} & & & & \downarrow \text{Id}_Y \otimes \text{br}_{X,Z} \\
 X \otimes (Y \otimes Z) & \xrightarrow{\text{br}_{X,Y \otimes Z}} & (Y \otimes Z) \otimes X & \xrightarrow{\text{as}_{Y,Z,X}} & Y \otimes (Z \otimes X)
 \end{array}$$