

$$\begin{array}{ccc}
 A \times (B \times C) & \xrightarrow{\alpha_{A,B,C}} & (A \times B) \times C \\
 f \times (g \times h) \downarrow & & \downarrow (f \times g) \times h \\
 A' \times (B' \times C') & \xrightarrow{\alpha_{A',B',C'}} & (A' \times B') \times C'
 \end{array}$$