$$((u \otimes v) \otimes w) \otimes x$$

$\alpha_{u \otimes v, w, x}$

$\alpha_{u, v, w} \otimes id_x$

$$(u \otimes v) \otimes (w \otimes x)$$

$$(u \otimes (v \otimes w)) \otimes x$$

$\circlearrowright$

$\alpha_{u, v, w \otimes x}$

$\alpha_{u, v \otimes w, x}$

$$u \otimes (v \otimes (w \otimes x)) \xleftarrow{\quad id_u \otimes \alpha_{v, w, x} \quad} u \otimes ((v \otimes w) \otimes x)$$