$$\langle\langle a, b\rangle, c\rangle \longmapsto \langle a, \langle b, c\rangle\rangle$$

$$(\mathbf{A} \times \mathbf{B}) \times \mathbf{C} \xrightarrow{\mathrm{as}_{\mathbf{A},\mathbf{B},\mathbf{C}}} \mathbf{A} \times (\mathbf{B} \times \mathbf{C})$$

$$(f \times g) \times h \downarrow \qquad\qquad \downarrow f \times (g \times h)$$

$$(\mathbf{A'} \times \mathbf{B'}) \times \mathbf{C'} \xrightarrow{\mathrm{as}_{\mathbf{A'},\mathbf{B'},\mathbf{C'}}} \mathbf{A'} \times (\mathbf{B'} \times \mathbf{C'})$$

$$\langle\langle f(a), g(b)\rangle, h(c)\rangle \longmapsto \langle f(a), \langle g(b), h(c)\rangle\rangle$$