

$$\begin{aligned}
& b = \text{Basis}[1]; \\
& (b \wedge \Delta_{1 \rightarrow 1, 2} \wedge s_2 \wedge m_{1, 2 \rightarrow 1}) = \\
& (b \wedge e_1 \wedge \eta_1) = (b \wedge \Delta_{1 \rightarrow 1, 2} \wedge s_1 \wedge m_{1, 2 \rightarrow 1})
\end{aligned}$$