

lhs =

$$\int (\mathbb{E} [\pi_i \mathbf{p}_i + \pi_j \mathbf{p}_j + \pi_k \mathbf{p}_k] \times \\ \mathcal{L} / @ (X_{i,j} [1] X_{i+1,k} [1] X_{j+1,k+1} [1])) \\ \mathbb{d}\{\mathbf{p}_i, \mathbf{p}_j, \mathbf{p}_k, \mathbf{x}_i, \mathbf{x}_j, \mathbf{x}_k, \mathbf{p}_{i+1}, \mathbf{p}_{j+1}, \mathbf{p}_{k+1}, \mathbf{x}_{i+1}, \\ \mathbf{x}_{j+1}, \mathbf{x}_{k+1}\};$$

rhs =

$$\int (\mathbb{E} [\pi_i \mathbf{p}_i + \pi_j \mathbf{p}_j + \pi_k \mathbf{p}_k] \times \\ \mathcal{L} / @ (X_{j,k} [1] X_{i,k+1} [1] X_{i+1,j+1} [1])) \\ \mathbb{d}\{\mathbf{p}_i, \mathbf{p}_j, \mathbf{p}_k, \mathbf{x}_i, \mathbf{x}_j, \mathbf{x}_k, \mathbf{p}_{i+1}, \mathbf{p}_{j+1}, \mathbf{p}_{k+1}, \mathbf{x}_{i+1}, \\ \mathbf{x}_{j+1}, \mathbf{x}_{k+1}\};$$

lhs == rhs