

Define $[aS_i = (\alpha_{i \rightarrow 2} \bar{R}_{1,i}) // P_{1,2},$

$\bar{aS}_i = \mathbb{E}_{\{i\} \rightarrow \{i\}} [-\alpha_i, -X_i \mathcal{R}_i \xi_i,$

$1 + \text{If} [\$k == \theta, \theta, (\bar{aS}_{\{i\}, \$k-1}) \$k [3] -$

$((\bar{aS}_{\{i\}, \theta}) \$k // aS_i // (\bar{aS}_{\{i\}, \$k-1}) \$k) [3]]]$