

Table [

cy = {**s**, **m**, **n**};

lhs = Sum[**F**₂[**cθ**, **cy**], {**cθ**, **Xl**}] // . gRules [**Xl**];

rhs = Sum[**F**₂[**cθ**, **cy**], {**cθ**, **Xr**}] // . gRules [**Xr**];

Simplify[**lhs** == **rhs**],

{**s**, {**1**, **-1**}}

]