

Table [

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

lhs = Sum [**F**₂ [**cy**, **c1**], {**c1**, **X1**}] // . gRules [**X1**];

rhs = Sum [**F**₂ [**cy**, **c1**], {**c1**, **Xr**}] // . gRules [**Xr**];

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

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

]