

t18\_projpl\_1  
(TMFNJ7QQhqK6L1UKWhWJNTb1DsrgCE8en7x)

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Let  $l1\_incsp\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_incsp\_1 : \iota \Rightarrow \iota$  be given. Let  $r5\_projpl\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r4\_projpl\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.(l1\_incsp\_1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_incsp\_1 \\
& \quad X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_incsp\_1 X0)) \Rightarrow (\forall X3. \\
& \quad (m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 \\
& \quad (u1\_incsp\_1 X0)) \Rightarrow ((r5\_projpl\_1 X0 X1 X2 X3 X4) \Leftrightarrow ((\neg r4\_projpl\_1 \\
& \quad X0 X1 X2 X3) \wedge ((\neg r4\_projpl\_1 X0 X2 X3 X4) \wedge ((\neg r4\_projpl\_1 X0 X3 X4 X1) \wedge \\
& \quad (\neg r4\_projpl\_1 X0 X4 X1 X2))))))))))
\end{aligned} \tag{1}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.(l1\_incsp\_1 X0) \Rightarrow (\neg(\exists X1.(m1\_subset\_1 X1 (u1\_incsp\_1 \\
& \quad X0)) \wedge (\exists X2.(m1\_subset\_1 X2 (u1\_incsp\_1 X0)) \wedge (\exists X3. \\
& \quad (m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \wedge (\exists X4.(m1\_subset\_1 X4 \\
& \quad (u1\_incsp\_1 X0)) \wedge (r5\_projpl\_1 X0 X1 X2 X3 X4)))))) \wedge (\forall X1. \\
& \quad (m1\_subset\_1 X1 (u1\_incsp\_1 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 \\
& \quad (u1\_incsp\_1 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow \\
& \quad (r4\_projpl\_1 X0 X1 X2 X3))))))
\end{aligned}$$