

t7\_projred1  
(TMQcPsraJf3mTaTTjvHo5Bc9HM3n47Sv8Qp)

October 27, 2020

Let  $v6\_incsp\_1 : \iota \Rightarrow o$  be given. Let  $v1\_incproj : \iota \Rightarrow o$  be given. Let  $v2\_incproj : \iota \Rightarrow o$  be given. Let  $v3\_incproj : \iota \Rightarrow o$  be given. Let  $v4\_incproj : \iota \Rightarrow o$  be given. Let  $l1\_incsp\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u2\_incsp\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_incsp\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_incsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(l1\_incsp\_1 X0) \Rightarrow ((v3\_incproj X0) \Leftrightarrow (\forall X1.(m1\_subset\_1 \\ X1 (u2\_incsp\_1 X0)) \Rightarrow (\exists X2.(m1\_subset\_1 X2 (u1\_incsp\_1 X0)) \wedge \\ (\exists X3.(m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \wedge (\exists X4.(m1\_subset\_1 \\ X4 (u1\_incsp\_1 X0)) \wedge ((X2 \neq X3) \wedge ((X3 \neq X4) \wedge ((X4 \neq X2) \wedge ((r1\_incsp\_1 \\ X0 X2 X1) \wedge ((r1\_incsp\_1 X0 X3 X1) \wedge (r1\_incsp\_1 X0 X4 X1)))))))))) \end{aligned} \quad (1)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v6\_incsp\_1 X0) \wedge ((v1\_incproj X0) \wedge ((v2\_incproj X0) \wedge \\ ((v3\_incproj X0) \wedge ((v4\_incproj X0) \wedge (l1\_incsp\_1 X0)))))) \Rightarrow (\forall X1. \\ (m1\_subset\_1 X1 (u2\_incsp\_1 X0)) \Rightarrow (\exists X2.(m1\_subset\_1 X2 \\ (u1\_incsp\_1 X0)) \wedge (r1\_incsp\_1 X0 X2 X1))) \end{aligned}$$