

t17\_projred1  
(TMW8Gi3gJLH5nGY7SxiM9CRTVu8MKCxBKeb)

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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  $v8\_incproj : \iota \Rightarrow o$  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. Let  $r2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v6\_incsp\_1 X0) \wedge ((v1\_incproj X0) \wedge ((v2\_incproj X0) \wedge \\ & ((v3\_incproj X0) \wedge ((v4\_incproj X0) \wedge ((v8\_incproj X0) \wedge (l1\_incsp\_1 \\ & X0)))))) \Rightarrow (\exists X1.(m1\_subset\_1 X1 (u1\_incsp\_1 X0)) \wedge (\exists X2. \\ & (m1\_subset\_1 X2 (u1\_incsp\_1 X0)) \wedge (\exists X3.(m1\_subset\_1 X3 \\ & (u1\_incsp\_1 X0)) \wedge (\exists X4.(m1\_subset\_1 X4 (u1\_incsp\_1 X0)) \wedge \\ & (\exists X5.(m1\_subset\_1 X5 (u2\_incsp\_1 X0)) \wedge ((r1\_incsp\_1 X0 \\ & X1 X5) \wedge ((r1\_incsp\_1 X0 X2 X5) \wedge ((r1\_incsp\_1 X0 X3 X5) \wedge ((r1\_incsp\_1 \\ & X0 X4 X5) \wedge (r2\_zfmisc\_1 X1 X2 X3 X4)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v6\_incsp\_1 X0) \wedge ((v1\_incproj X0) \wedge ((v2\_incproj X0) \wedge \\ & ((v3\_incproj X0) \wedge ((v4\_incproj X0) \wedge (l1\_incsp\_1 X0)))))) \Rightarrow ((\exists X1. \\ & (m1\_subset\_1 X1 (u2\_incsp\_1 X0)) \wedge (\exists X2.(m1\_subset\_1 X2 \\ & (u1\_incsp\_1 X0)) \wedge (\exists X3.(m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \wedge \\ & (\exists X4.(m1\_subset\_1 X4 (u1\_incsp\_1 X0)) \wedge (\exists X5.(m1\_subset\_1 \\ & X5 (u1\_incsp\_1 X0)) \wedge ((r1\_incsp\_1 X0 X2 X1) \wedge ((r1\_incsp\_1 X0 X3 X1) \wedge \\ & ((r1\_incsp\_1 X0 X4 X1) \wedge ((r1\_incsp\_1 X0 X5 X1) \wedge (r2\_zfmisc\_1 X2 X3 \\ & X4 X5)))))))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u2\_incsp\_1 X0)) \Rightarrow \\ & (\exists X2.(m1\_subset\_1 X2 (u1\_incsp\_1 X0)) \wedge (\exists X3.(m1\_subset\_1 \\ & X3 (u1\_incsp\_1 X0)) \wedge (\exists X4.(m1\_subset\_1 X4 (u1\_incsp\_1 X0)) \wedge \\ & (\exists X5.(m1\_subset\_1 X5 (u1\_incsp\_1 X0)) \wedge ((r1\_incsp\_1 X0 \\ & X2 X1) \wedge ((r1\_incsp\_1 X0 X3 X1) \wedge ((r1\_incsp\_1 X0 X4 X1) \wedge ((r1\_incsp\_1 \\ & X0 X5 X1) \wedge (r2\_zfmisc\_1 X2 X3 X4 X5)))))))))) \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v6\_incsp\_1 X0) \wedge ((v1\_incproj X0) \wedge ((v2\_incproj X0) \wedge \\ & ((v3\_incproj X0) \wedge ((v4\_incproj X0) \wedge ((v8\_incproj X0) \wedge (l1\_incsp\_1 \\ & X0)))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u2\_incsp\_1 X0)) \Rightarrow (\exists X2. \\ & (m1\_subset\_1 X2 (u1\_incsp\_1 X0)) \wedge (\exists X3.(m1\_subset\_1 X3 \\ & (u1\_incsp\_1 X0)) \wedge (\exists X4.(m1\_subset\_1 X4 (u1\_incsp\_1 X0)) \wedge \\ & (\exists X5.(m1\_subset\_1 X5 (u1\_incsp\_1 X0)) \wedge ((r1\_incsp\_1 X0 \\ & X2 X1) \wedge ((r1\_incsp\_1 X0 X3 X1) \wedge ((r1\_incsp\_1 X0 X4 X1) \wedge ((r1\_incsp\_1 \\ & X0 X5 X1) \wedge (r2\_zfmisc\_1 X2 X3 X4 X5)))))))))) \end{aligned}$$