

t36\_parsp\_1  
(TMPXdujjLTdYpGgchB1u77zmSe7jXaEztNb)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_parsp\_1 : \iota \Rightarrow o$  be given. Let  $l1\_parsp\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_parsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_parsp\_1 X0)) \Rightarrow ((v2\_parsp\_1 \\
& X0) \Leftrightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\
& (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 \\
& (u1\_struct\_0 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 X0)) \Rightarrow \\
& (\forall X5.(m1\_subset\_1 X5 (u1\_struct\_0 X0)) \Rightarrow (\forall X6.(m1\_subset\_1 \\
& X6 (u1\_struct\_0 X0)) \Rightarrow (\forall X7.(m1\_subset\_1 X7 (u1\_struct\_0 \\
& X0)) \Rightarrow (\forall X8.(m1\_subset\_1 X8 (u1\_struct\_0 X0)) \Rightarrow ((r1\_parsp\_1 \\
& X0 X1 X2 X2 X1) \wedge ((r1\_parsp\_1 X0 X1 X2 X3 X3) \wedge ((\neg (r1\_parsp\_1 X0 X1 X2 \\
& X5 X6) \wedge ((r1\_parsp\_1 X0 X1 X2 X7 X8) \wedge ((\neg r1\_parsp\_1 X0 X5 X6 X7 X8) \wedge \\
& (X1 \neq X2)))))) \wedge (((r1\_parsp\_1 X0 X1 X2 X1 X3) \Rightarrow (r1\_parsp\_1 X0 X2 X1 X2 \\
& X3)) \wedge (\exists X9.(m1\_subset\_1 X9 (u1\_struct\_0 X0)) \wedge ((r1\_parsp\_1 \\
& X0 X1 X2 X3 X9) \wedge (r1\_parsp\_1 X0 X1 X3 X2 X9))))))))))))) \tag{1}
\end{aligned}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_parsp\_1 X0) \wedge (l1\_parsp\_1 \\
& X0))) \Rightarrow ((\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\
& (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (X1 = X2))) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 \\
& X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4. \\
& (m1\_subset\_1 X4 (u1\_struct\_0 X0)) \Rightarrow (r1\_parsp\_1 X0 X1 X2 X3 X4))))))
\end{aligned}$$