

t10\_sf\_mastr  
(TMK4RU3LozJmzqBSxTcmXjo7HW7tB5JwC6n)

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Let  $v1\_ami\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_scmf\_sa\_2 : \iota$  be given. Let  $m1\_scmf\_sa\_2 : \iota \Rightarrow o$  be given. Let  $k15\_scmf\_sa\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k14\_scmf\_sa\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xtuple\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_10 : \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k11\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_9 : \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X1.((v1\_ami\_2 X1) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X2.((v1\_ami\_2 X2) \wedge (m1\_subset\_1 X2 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X3.((v1\_ami\_2 X3) \wedge (m1\_subset\_1 X3 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X4.(m1\_scmf\_sa\_2 X4) \Rightarrow (\forall X5.(m1\_scmf\_sa\_2 X5) \Rightarrow ( \\
& (k14\_scmf\_sa\_2 X0 X1 X4 = k14\_scmf\_sa\_2 X2 X3 X5) \Rightarrow ((X1 = X3) \wedge ((X0 = X2) \wedge \\
& (X4 = X5))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\
& (k3\_xtuple\_0 X0 X1 X2 = k3\_xtuple\_0 X3 X4 X5) \Rightarrow ((X0 = X3) \wedge ((X1 = X4) \wedge \\
& (X2 = X5)))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X1.((v1\_ami\_2 X1) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X2.(m1\_scmf\_sa\_2 X2) \Rightarrow (k15\_scmf\_sa\_2 X0 X1 X2 = k3\_xtuple\_0 \\
& np\_10 k1\_xboole\_0 (k11\_finseq\_1 X0 X2 X1))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X1.((v1\_ami\_2 X1) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\
& (\forall X2.(m1\_scmf\_sa\_2 X2) \Rightarrow (k14\_scmf\_sa\_2 X0 X1 X2 = k3\_xtuple\_0 \\
& np\_9 k1\_xboole\_0 (k11\_finseq\_1 X0 X2 X1))))
\end{aligned} \tag{4}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\ & (\forall X1.((v1\_ami\_2 X1) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\ & (\forall X2.((v1\_ami\_2 X2) \wedge (m1\_subset\_1 X2 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\ & (\forall X3.((v1\_ami\_2 X3) \wedge (m1\_subset\_1 X3 (u1\_struct\_0 k1\_scmfsa\_2))) \Rightarrow \\ & (\forall X4.(m1\_scmfsa\_2 X4) \Rightarrow (\forall X5.(m1\_scmfsa\_2 X5) \Rightarrow ( \\ & (k15\_scmfsa\_2 X1 X0 X4 = k15\_scmfsa\_2 X3 X2 X5) \Rightarrow ((X0 = X2) \wedge ((X1 = X3) \wedge \\ & (X4 = X5)))))))))) \end{aligned}$$