

t4\_parsp\_1  
(TMW1e7DBNFQJELRRBVZf1EQu55AiHDVumgj)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v6\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v33\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow o$  be given. Let  $v5\_group\_1 : \iota \Rightarrow o$  be given. Let  $v4\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v5\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $l6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_parsp\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_parsp\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_parsp\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_group\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_mcart\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_mcart\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_struct\_0 : \iota \Rightarrow \iota$  be

given. Let  $k3\_mcart\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge ((\neg v6\_struct\_0 X0) \wedge ((v13\_algstr\_0 \\
& X0) \wedge ((v33\_algstr\_0 X0) \wedge ((v3\_group\_1 X0) \wedge ((v5\_group\_1 X0) \wedge ( \\
& (v4\_vectsp\_1 X0) \wedge ((v5\_vectsp\_1 X0) \wedge ((v2\_rlvect\_1 X0) \wedge ((v3\_rlvect\_1 \\
& X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l6\_algstr\_0 X0)))))))))) \Rightarrow (\forall X1. \\
& (X1 = k7\_parsp\_1 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow ((X2 \in k6\_parsp\_1 X0) \wedge \\
& (\exists X3.(m1\_subset\_1 X3 (k3\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0))) \wedge (\exists X4.(m1\_subset\_1 X4 (k3\_zfmisc\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0))) \wedge (\exists X5. \\
& (m1\_subset\_1 X5 (k3\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) \\
& (u1\_struct\_0 X0))) \wedge (\exists X6.(m1\_subset\_1 X6 (k3\_zfmisc\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0))) \wedge ((X2 = k5\_domain\_1 \\
& (k3\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0)) \\
& (k3\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0)) \\
& (k3\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0)) \\
& (k3\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0)) \\
X3 X4 X5 X6) \wedge ((k5\_algstr\_0 X0 (k8\_group\_1 X0 (k5\_algstr\_0 X0 (k1\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X3) (k1\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X4)) (k5\_algstr\_0 \\
& X0 (k2\_mcart\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0) X5) (k2\_mcart\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0) X6))) (k8\_group\_1 X0 (k5\_algstr\_0 X0 (k1\_mcart\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X5) (k1\_mcart\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X6)) (k5\_algstr\_0 X0 (k2\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X3) (k2\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X4))) = k4\_struct\_0 \\
& X0) \wedge ((k5\_algstr\_0 X0 (k8\_group\_1 X0 (k5\_algstr\_0 X0 (k1\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X3) (k1\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X4)) (k5\_algstr\_0 \\
& X0 (k3\_mcart\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0) X5) (k3\_mcart\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0) X6))) (k8\_group\_1 X0 (k5\_algstr\_0 X0 (k1\_mcart\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X5) (k1\_mcart\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X6)) (k5\_algstr\_0 X0 (k3\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X3) (k3\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X4))) = k4\_struct\_0 \\
& X0) \wedge (k5\_algstr\_0 X0 (k8\_group\_1 X0 (k5\_algstr\_0 X0 (k2\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X3) (k2\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X4)) (k5\_algstr\_0 \\
& X0 (k3\_mcart\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0) X5) (k3\_mcart\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0) X6))) (k8\_group\_1 X0 (k5\_algstr\_0 X0 (k2\_mcart\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X5) (k2\_mcart\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X6)) (k5\_algstr\_0 X0 (k3\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X3) (k3\_mcart\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0) (u1\_struct\_0 X0) X4))) = k4\_struct\_0 \\
& X0))))))))))
\end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((\neg v6\_struct\_0 X0) \wedge ((v13\_algstr\_0 \\ &X0) \wedge ((v33\_algstr\_0 X0) \wedge ((v3\_group\_1 X0) \wedge ((v5\_group\_1 X0) \wedge \\ &(v4\_vectsp\_1 X0) \wedge ((v5\_vectsp\_1 X0) \wedge ((v2\_rlvect\_1 X0) \wedge ((v3\_rlvect\_1 \\ &X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l6\_algstr\_0 X0)))))))))) \Rightarrow (k6\_parsp\_1 \\ &X0 = k4\_zfmisc\_1 (k5\_parsp\_1 X0) (k5\_parsp\_1 X0) (k5\_parsp\_1 X0) \\ &(k5\_parsp\_1 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (3)$$

**Theorem 1**

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((\neg v6\_struct\_0 X0) \wedge ((v13\_algstr\_0 \\ &X0) \wedge ((v33\_algstr\_0 X0) \wedge ((v3\_group\_1 X0) \wedge ((v5\_group\_1 X0) \wedge \\ &(v4\_vectsp\_1 X0) \wedge ((v5\_vectsp\_1 X0) \wedge ((v2\_rlvect\_1 X0) \wedge ((v3\_rlvect\_1 \\ &X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l6\_algstr\_0 X0)))))))))) \Rightarrow (r1\_tarski \\ &(k7\_parsp\_1 X0) (k4\_zfmisc\_1 (k5\_parsp\_1 X0) (k5\_parsp\_1 X0) ( \\ &k5\_parsp\_1 X0) (k5\_parsp\_1 X0))) \end{aligned}$$