

t41\_rlvect\_5

(TMbJ4g3t4dijE8q7bh1t8EaAPdp1jeo4gDm)

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Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  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  $v5\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v6\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v7\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v8\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v1\_rlvect\_5 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $m1\_rlsub\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_rlvect\_5 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $k1\_rlvect\_5 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\
& X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\
& ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\
& X0)))))))))) \Rightarrow (\forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v13\_algstr\_0 \\
& X1) \wedge ((v2\_rlvect\_1 X1) \wedge ((v3\_rlvect\_1 X1) \wedge ((v4\_rlvect\_1 X1) \wedge \\
& ((v5\_rlvect\_1 X1) \wedge ((v6\_rlvect\_1 X1) \wedge ((v7\_rlvect\_1 X1) \wedge ((v8\_rlvect\_1 \\
& X1) \wedge (l1\_rlvect\_1 X1)))))))))) \Rightarrow (\forall X2. ((\neg v2\_struct\_0 X2) \wedge \\
& ((v13\_algstr\_0 X2) \wedge ((v2\_rlvect\_1 X2) \wedge ((v3\_rlvect\_1 X2) \wedge ((v4\_rlvect\_1 \\
& X2) \wedge ((v5\_rlvect\_1 X2) \wedge ((v6\_rlvect\_1 X2) \wedge ((v7\_rlvect\_1 X2) \wedge \\
& ((v8\_rlvect\_1 X2) \wedge (l1\_rlvect\_1 X2)))))))))) \Rightarrow (((m1\_rlsub\_1 \\
& X0 X1) \wedge (m1\_rlsub\_1 X1 X2)) \Rightarrow (m1\_rlsub\_1 X0 X2)))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\
& X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\
& ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\
& X0)))))))))) \Rightarrow (\forall X1. (m1\_rlsub\_1 X1 X0) \Rightarrow ((\neg v2\_struct\_0 \\
& X1) \wedge ((v13\_algstr\_0 X1) \wedge ((v2\_rlvect\_1 X1) \wedge ((v3\_rlvect\_1 X1) \wedge \\
& ((v4\_rlvect\_1 X1) \wedge ((v5\_rlvect\_1 X1) \wedge ((v6\_rlvect\_1 X1) \wedge ((v7\_rlvect\_1 \\
& X1) \wedge ((v8\_rlvect\_1 X1) \wedge (l1\_rlvect\_1 X1))))))))))
\end{aligned} \tag{2}$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0)\wedge((v13\_algstr\_0 X0)\wedge((v2\_rlvect\_1 \\ X0)\wedge((v3\_rlvect\_1 X0)\wedge((v4\_rlvect\_1 X0)\wedge((v5\_rlvect\_1 X0)\wedge \\ ((v6\_rlvect\_1 X0)\wedge((v7\_rlvect\_1 X0)\wedge((v8\_rlvect\_1 X0)\wedge((v1\_rlvect\_5 \\ X0)\wedge(l1\_rlvect\_1 X0))))))))))\Rightarrow(\forall X1.(m2\_subset\_1 X1 \\ k1\_numbers k5\_numbers)\Rightarrow(\forall X2.(X2 = k2\_rlvect\_5 X0 X1)\Leftrightarrow( \\ \forall X3.(X3 \in X2)\Leftrightarrow(\exists X4.((v1\_rlvect\_1 X4)\wedge(m1\_rlsub\_1 \\ X4 X0))\wedge((X4 = X3)\wedge(k1\_rlvect\_5 X4 = X1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0)\wedge((v13\_algstr\_0 X0)\wedge((v2\_rlvect\_1 \\ X0)\wedge((v3\_rlvect\_1 X0)\wedge((v4\_rlvect\_1 X0)\wedge((v5\_rlvect\_1 X0)\wedge \\ ((v6\_rlvect\_1 X0)\wedge((v7\_rlvect\_1 X0)\wedge((v8\_rlvect\_1 X0)\wedge((v1\_rlvect\_5 \\ X0)\wedge(l1\_rlvect\_1 X0))))))))))\Rightarrow(\forall X1.(m1\_rlsub\_1 X1 X0)\Rightarrow \\ (v1\_rlvect\_5 X1)) \end{aligned} \quad (5)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers)\Rightarrow(\forall X1. \\ ((\neg v2\_struct\_0 X1)\wedge((v13\_algstr\_0 X1)\wedge((v2\_rlvect\_1 X1)\wedge(( \\ v3\_rlvect\_1 X1)\wedge((v4\_rlvect\_1 X1)\wedge((v5\_rlvect\_1 X1)\wedge((v6\_rlvect\_1 \\ X1)\wedge((v7\_rlvect\_1 X1)\wedge((v8\_rlvect\_1 X1)\wedge((v1\_rlvect\_5 X1)\wedge \\ (l1\_rlvect\_1 X1))))))))))\Rightarrow(\forall X2.(m1\_rlsub\_1 X2 X1)\Rightarrow( \\ r1\_tarSKI (k2\_rlvect\_5 X2 X0) (k2\_rlvect\_5 X1 X0))) \end{aligned}$$