

# t6\_lp\_space (TMJXeN- JTK6PLHfHoaDCtR7EAmtGJThjCiph)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $g1\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_lp\_space : \iota \Rightarrow \iota$  be given. Let  $k10\_rsspace : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_rsspace : \iota$  be given. Let  $k8\_rsspace : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_rsspace : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  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  $m1\_rlsub\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow ((r1\_xxreal\_0 np\_1 X0) \Rightarrow \\ (m1\_rlsub\_1 (g1\_rlvect\_1 (k2\_lp\_space X0) (k10\_rsspace k7\_rsspace \\ (k2\_lp\_space X0)) (k8\_rsspace k7\_rsspace (k2\_lp\_space X0)) (k9\_rsspace \\ k7\_rsspace (k2\_lp\_space X0))) k7\_rsspace)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} (v13\_algstr\_0 k7\_rsspace) \wedge ((v2\_rlvect\_1 k7\_rsspace) \wedge ((v3\_rlvect\_1 \\ k7\_rsspace) \wedge ((v4\_rlvect\_1 k7\_rsspace) \wedge ((v5\_rlvect\_1 k7\_rsspace) \wedge \\ ((v6\_rlvect\_1 k7\_rsspace) \wedge ((v7\_rlvect\_1 k7\_rsspace) \wedge (v8\_rlvect\_1 \\ k7\_rsspace)))))))) \end{aligned} \quad (2)$$

Assume the following.

$$(\neg v2\_struct\_0 k7\_rsspace) \wedge (v1\_rlvect\_1 k7\_rsspace) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\ X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\ ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\ X0)))))))))) \Rightarrow (\forall X1.(m1\_rlsub\_1 X1 X0) \Rightarrow ((\neg v2\_struct\_0 \\ X1) \wedge ((v13\_algstr\_0 X1) \wedge ((v2\_rlvect\_1 X1) \wedge ((v3\_rlvect\_1 X1) \wedge \\ ((v4\_rlvect\_1 X1) \wedge ((v5\_rlvect\_1 X1) \wedge ((v6\_rlvect\_1 X1) \wedge ((v7\_rlvect\_1 \\ X1) \wedge ((v8\_rlvect\_1 X1) \wedge (l1\_rlvect\_1 X1)))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$l1\_rlvect\_1 \ k7\_rsspace \tag{5}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 \ X0 \ k1\_numbers) \Rightarrow ((r1\_xxreal\_0 \ np\_1 \ X0) \Rightarrow \\ & ((v2\_rlvect\_1 \ (g1\_rlvect\_1 \ (k2\_lp\_space \ X0) \ (k10\_rsspace \ k7\_rsspace \\ & (k2\_lp\_space \ X0)) \ (k8\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k9\_rsspace \\ & k7\_rsspace \ (k2\_lp\_space \ X0)))) \wedge ((v3\_rlvect\_1 \ (g1\_rlvect\_1 \ ( \\ & k2\_lp\_space \ X0) \ (k10\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k8\_rsspace \\ & k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k9\_rsspace \ k7\_rsspace \ (k2\_lp\_space \\ & X0)))) \wedge ((v4\_rlvect\_1 \ (g1\_rlvect\_1 \ (k2\_lp\_space \ X0) \ (k10\_rsspace \\ & k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k8\_rsspace \ k7\_rsspace \ (k2\_lp\_space \\ & X0)) \ (k9\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)))) \wedge ((v13\_algstr\_0 \\ & (g1\_rlvect\_1 \ (k2\_lp\_space \ X0) \ (k10\_rsspace \ k7\_rsspace \ (k2\_lp\_space \\ & X0)) \ (k8\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k9\_rsspace \ k7\_rsspace \\ & (k2\_lp\_space \ X0)))) \wedge ((v5\_rlvect\_1 \ (g1\_rlvect\_1 \ (k2\_lp\_space \\ & X0) \ (k10\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k8\_rsspace \ k7\_rsspace \\ & (k2\_lp\_space \ X0)) \ (k9\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)))) \wedge \\ & ((v6\_rlvect\_1 \ (g1\_rlvect\_1 \ (k2\_lp\_space \ X0) \ (k10\_rsspace \ k7\_rsspace \\ & (k2\_lp\_space \ X0)) \ (k8\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k9\_rsspace \\ & k7\_rsspace \ (k2\_lp\_space \ X0)))) \wedge ((v7\_rlvect\_1 \ (g1\_rlvect\_1 \ ( \\ & k2\_lp\_space \ X0) \ (k10\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k8\_rsspace \\ & k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k9\_rsspace \ k7\_rsspace \ (k2\_lp\_space \\ & X0)))) \wedge (v8\_rlvect\_1 \ (g1\_rlvect\_1 \ (k2\_lp\_space \ X0) \ (k10\_rsspace \\ & k7\_rsspace \ (k2\_lp\_space \ X0)) \ (k8\_rsspace \ k7\_rsspace \ (k2\_lp\_space \\ & X0)) \ (k9\_rsspace \ k7\_rsspace \ (k2\_lp\_space \ X0))))))))) \end{aligned}$$