

l3_rsspace3 (TMHfDwXboy- HeT2qYNNG5ZHbo5fp4DvMLRP1)

October 27, 2020

Let $m1_rlsub_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rsspace3 : \iota$ 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 $v2_struct_0 : \iota \Rightarrow o$ 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 $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_rlsub_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_rlvect_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow ((v1_rlsub_1 X1 X0) \Rightarrow ((v1_xboole_0 X1) \vee (m1_rlsub_1 (g1_rlvect_1 \\ & X1 (k10_rsspace X0 X1) (k8_rsspace X0 X1) (k9_rsspace X0 X1)) X0)))) \end{aligned} \quad (1)$$

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.

$$v1_rlsub_1 k1_rsspace3 k7_rsspace \quad (3)$$

Assume the following.

$$(\neg v2_struct_0 k7_rsspace) \wedge (v1_rlvect_1 k7_rsspace) \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_rsspace3 \quad (5)$$

Assume the following.

$$l1_rlvect_1 \ k7_rsspace \quad (6)$$

Assume the following.

$$m1_subset_1 \ k1_rsspace3 \ (k1_zfmisc_1 \ (u1_struct_0 \ k7_rsspace)) \quad (7)$$

Theorem 1

$$m1_rlsub_1 \ (g1_rlvect_1 \ k1_rsspace3 \ (k10_rsspace \ k7_rsspace \ k1_rsspace3) \ (k8_rsspace \ k7_rsspace \ k1_rsspace3) \ (k9_rsspace \ k7_rsspace \ k1_rsspace3)) \ k7_rsspace$$