t2_rusub_3 (TMKJDSn8cWZbhgS8bHCTH1ETLdPebvGxsYu)

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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 $v2\_bhsp\_1 : \iota \Rightarrow o$ be given. Let $l1\_bhsp\_1 : \iota \Rightarrow o$ 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 $r1\_struct\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_rusub\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_rlvect\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_rlvect\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $k1\_rlvect\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v5\_rlvect\_1\ X0) \wedge ((v6\_rlvect\_1\ X0) \wedge ((v7\_rlvect\_1\ X0) \wedge ((v8\_rlvect\_1\ X0) \wedge ((v2\_bhsp\_1\ X0) \wedge (l1\_bhsp\_1\ X0))))))))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(r1\_struct\_0\ (k1\_rusub\_3\ X0\ X1)\ X2) \Leftrightarrow (\exists X3.(m2\_rlvect\_2\ X3\ X0\ X1) \wedge (X2 = k6\_rlvect\_2\ X0\ X3)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v5\_rlvect\_1\ X1) \wedge ((v6\_rlvect\_1\ X1) \wedge ((v7\_rlvect\_1\ X1) \wedge ((v8\_rlvect\_1\ X1) \wedge (l1\_rlvect\_1\ X1))))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow ((X0 \in X2) \Rightarrow (r1\_struct\_0\ (k1\_rlvect\_3\ X1\ X2)\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v5\_rlvect\_1\ X1) \wedge ((v6\_rlvect\_1\ X1) \wedge ((v7\_rlvect\_1\ X1) \wedge ((v8\_rlvect\_1\ X1) \wedge (l1\_rlvect\_1\ X1))))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow ((r1\_struct\_0\ (k1\_rlvect\_3\ X1\ X2)\ X0) \Leftrightarrow (\exists X3.(m2\_rlvect\_2\ X3\ X1\ X2) \wedge (X0 = k6\_rlvect\_2\ X1\ X3)))) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_bhsp\_1\ X0) \Rightarrow (l1\_rlvect\_1\ X0) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v5\_rlvect\_1\ X0) \wedge ((v6\_rlvect\_1\ X0) \wedge ((v7\_rlvect\_1\ X0) \wedge ((v8\_rlvect\_1\ X0) \wedge ((v2\_bhsp\_1\ X0) \wedge (l1\_bhsp\_1\ X0))))))))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(X2 \in X1) \Rightarrow (r1\_struct\_0\ (k1\_rusub\_3\ X0\ X1)\ X2)))$$