

## t4\_reloc

(TMZwUWch1AVFDmBoXucpLBkaAAJVjTFdDr9)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_ami\_3 : \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k2\_compos\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $np\_3 : \iota$  be given. Let  $np\_4 : \iota$  be given. Let  $np\_5 : \iota$  be given. Let  $k5\_compos\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_ami\_2 : \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k3\_ami\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_ami\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_compos\_0 : \iota \Rightarrow o$  be given. Let  $v2\_compos\_0 : \iota \Rightarrow o$  be given. Let  $v3\_compos\_0 : \iota \Rightarrow o$  be given. Let  $v4\_compos\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_ami\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_ami\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_ami\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v5\_compos\_0 : \iota \Rightarrow o$  be given. Let  $k6\_compos\_0 : \iota \Rightarrow \iota$  be given. Let  $l1\_compos\_1 : \iota \Rightarrow o$  be given. Let  $l1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_memstr\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_extpro\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_compos\_1 k1\_ami\_3)) \Rightarrow & (\neg(k2\_compos\_0 \\ & (u1\_compos\_1 k1\_ami\_3) X0 = np\_2) \wedge (\forall X1.((v1\_ami\_2 X1) \wedge \\ & (m1\_subset\_1 X1 (u1\_struct\_0 k1\_ami\_3))) \Rightarrow (\forall X2.((v1\_ami\_2 \\ & X2) \wedge (m1\_subset\_1 X2 (u1\_struct\_0 k1\_ami\_3))) \Rightarrow (X0 \neq k3\_ami\_3 X1 \\ & X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_compos\_1 k1\_ami\_3)) \Rightarrow & (\neg(k2\_compos\_0 \\ & (u1\_compos\_1 k1\_ami\_3) X0 = np\_1) \wedge (\forall X1.((v1\_ami\_2 X1) \wedge \\ & (m1\_subset\_1 X1 (u1\_struct\_0 k1\_ami\_3))) \Rightarrow (\forall X2.((v1\_ami\_2 \\ & X2) \wedge (m1\_subset\_1 X2 (u1\_struct\_0 k1\_ami\_3))) \Rightarrow (X0 \neq k2\_ami\_3 X1 \\ & X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 (u1\_compos\_1 k1\_ami\_3)) \Rightarrow & ((k2\_compos\_0 \\ & (u1\_compos\_1 k1\_ami\_3) X0 = k6\_numbers) \Rightarrow (X0 = k2\_compos\_1 k1\_ami\_3)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge \\ ((v1\_compos\_0\ X1) \wedge ((v2\_compos\_0\ X1) \wedge (v3\_compos\_0\ X1)))) \Rightarrow (\forall X2. \\ (m1\_subset\_1\ X2\ X1) \Rightarrow ((v4\_compos\_0\ X2\ X1) \Rightarrow (k5\_compos\_0\ X1\ X2\ X0 = \\ X2)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1\ X0\ (u1\_compos\_1\ k1\_ami\_3)) \Rightarrow (\neg(k2\_compos\_0 \\ (u1\_compos\_1\ k1\_ami\_3)\ X0 = np\_5) \wedge (\forall X1.((v1\_ami\_2\ X1) \wedge \\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_ami\_3))) \Rightarrow (\forall X2.((v1\_ami\_2 \\ X2) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ k1\_ami\_3))) \Rightarrow (X0 \neq k6\_ami\_3\ X1 \\ X2)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1\ X0\ (u1\_compos\_1\ k1\_ami\_3)) \Rightarrow (\neg(k2\_compos\_0 \\ (u1\_compos\_1\ k1\_ami\_3)\ X0 = np\_4) \wedge (\forall X1.((v1\_ami\_2\ X1) \wedge \\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_ami\_3))) \Rightarrow (\forall X2.((v1\_ami\_2 \\ X2) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ k1\_ami\_3))) \Rightarrow (X0 \neq k5\_ami\_3\ X1 \\ X2)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1\ X0\ (u1\_compos\_1\ k1\_ami\_3)) \Rightarrow (\neg(k2\_compos\_0 \\ (u1\_compos\_1\ k1\_ami\_3)\ X0 = np\_3) \wedge (\forall X1.((v1\_ami\_2\ X1) \wedge \\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_ami\_3))) \Rightarrow (\forall X2.((v1\_ami\_2 \\ X2) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ k1\_ami\_3))) \Rightarrow (X0 \neq k4\_ami\_3\ X1 \\ X2)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge \\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1 \\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \end{aligned} \quad (8)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (9)$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1) \wedge (v3\_ordinal1\ k4\_ordinal1) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v1\_ami\_2\ X0) \wedge (m1\_subset\_1\ X0\ (u1\_struct\_0 \\ k1\_ami\_3))) \wedge ((v1\_ami\_2\ X1) \wedge (m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_ami\_3)))) \Rightarrow \\ (v4\_compos\_0\ (k6\_ami\_3\ X0\ X1)\ (u1\_compos\_1\ k1\_ami\_3)) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_ami\_2 X0)\wedge(m1\_subset\_1 X0 (u1\_struct\_0 k1\_ami\_3)))\wedge((v1\_ami\_2 X1)\wedge(m1\_subset\_1 X1 (u1\_struct\_0 k1\_ami\_3))))\Rightarrow (v4\_compos\_0 (k5\_ami\_3 X0 X1) (u1\_compos\_1 k1\_ami\_3)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_ami\_2 X0)\wedge(m1\_subset\_1 X0 (u1\_struct\_0 k1\_ami\_3)))\wedge((v1\_ami\_2 X1)\wedge(m1\_subset\_1 X1 (u1\_struct\_0 k1\_ami\_3))))\Rightarrow (v4\_compos\_0 (k4\_ami\_3 X0 X1) (u1\_compos\_1 k1\_ami\_3)) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_ami\_2 X0)\wedge(m1\_subset\_1 X0 (u1\_struct\_0 k1\_ami\_3)))\wedge((v1\_ami\_2 X1)\wedge(m1\_subset\_1 X1 (u1\_struct\_0 k1\_ami\_3))))\Rightarrow (v4\_compos\_0 (k3\_ami\_3 X0 X1) (u1\_compos\_1 k1\_ami\_3)) \quad (14)$$

Assume the following.

$$\forall X0.((v1\_compos\_0 X0)\wedge(v5\_compos\_0 X0))\Rightarrow(v4\_compos\_0 (k6\_compos\_0 X0) X0) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_ami\_2 X0)\wedge(m1\_subset\_1 X0 (u1\_struct\_0 k1\_ami\_3)))\wedge((v1\_ami\_2 X1)\wedge(m1\_subset\_1 X1 (u1\_struct\_0 k1\_ami\_3))))\Rightarrow (v4\_compos\_0 (k2\_ami\_3 X0 X1) (u1\_compos\_1 k1\_ami\_3)) \quad (16)$$

Assume the following.

$$\neg v1\_xboole\_0 k1\_numbers \quad (17)$$

Assume the following.

$$\forall X0.(l1\_compos\_1 X0)\Rightarrow((v1\_compos\_0 (u1\_compos\_1 X0))\wedge((v2\_compos\_0 (u1\_compos\_1 X0))\wedge((v3\_compos\_0 (u1\_compos\_1 X0))\wedge(v5\_compos\_0 (u1\_compos\_1 X0)))))) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.(l1\_extpro\_1 X1 X0)\Rightarrow((l1\_memstr\_0 X1 X0)\wedge(l1\_compos\_1 X1)) \quad (19)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (20)$$

Assume the following.

$$(v1\_extpro\_1 k1\_ami\_3 np\_2)\wedge(l1\_extpro\_1 k1\_ami\_3 np\_2) \quad (21)$$

Assume the following.

$$\forall X0.(l1\_compos\_1 X0) \Rightarrow (k2\_compos\_1 X0 = k6\_compos\_0 (u1\_compos\_1 X0)) \quad (22)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1) \Rightarrow (v7\_ordinal1 X0) \quad (23)$$

Assume the following.

$$\forall X0.(v5\_compos\_0 X0) \Rightarrow (\neg v1\_xboole\_0 X0) \quad (24)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (u1\_compos\_1 k1\_ami\_3)) \Rightarrow (\forall X1. \\ & (m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow ((\neg(k2\_compos\_0 (u1\_compos\_1 \\ & k1\_ami\_3) X0 \neq k6\_numbers) \wedge ((k2\_compos\_0 (u1\_compos\_1 k1\_ami\_3) \\ & X0 \neq np\_1) \wedge ((k2\_compos\_0 (u1\_compos\_1 k1\_ami\_3) X0 \neq np\_2) \wedge ( \\ & (k2\_compos\_0 (u1\_compos\_1 k1\_ami\_3) X0 \neq np\_3) \wedge ((k2\_compos\_0 \\ & (u1\_compos\_1 k1\_ami\_3) X0 \neq np\_4) \wedge (k2\_compos\_0 (u1\_compos\_1 \\ & k1\_ami\_3) X0 \neq np\_5)))))) \Rightarrow (k5\_compos\_0 (u1\_compos\_1 k1\_ami\_3) \\ & X0 X1 = X0))) \end{aligned}$$