

t1\_unialg\_2  
(TMTHkVJFdQHvyR3T8oLpkJxfWHyzyBGGeVe)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_unialg\_1 : \iota \Rightarrow o$  be given. Let  $v3\_unialg\_1 : \iota \Rightarrow o$  be given. Let  $v4\_unialg\_1 : \iota \Rightarrow o$  be given. Let  $l1\_unialg\_1 : \iota \Rightarrow o$  be given. Let  $r1\_unialg\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_unialg\_1 : \iota \Rightarrow \iota$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_unialg\_1 : \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v2\_margrel1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k19\_margrel1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_unialg\_1 X0) \wedge ((v4\_unialg\_1 X0) \wedge (l1\_unialg\_1 X0)))) \Rightarrow (m2\_finseq\_1 (k1\_unialg\_1 X0) k5\_numbers) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_unialg\_1 X0) \wedge ((v4\_unialg\_1 X0) \wedge (l1\_unialg\_1 X0)))) \Rightarrow (\forall X1.(m2\_finseq\_1 X1 k5\_numbers) \Rightarrow \\ & ((X1 = k1\_unialg\_1 X0) \Leftrightarrow ((k3\_finseq\_1 X1 = k3\_finseq\_1 (u1\_unialg\_1 X0)) \wedge (\forall X2.(v7\_ordinal1 X2) \Rightarrow ((X2 \in k4\_finseq\_1 X1) \Rightarrow (\forall X3. \\ & ((v1\_funct\_1 X3) \wedge ((\neg v1\_xboole\_0 X3) \wedge ((v2\_margrel1 X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k3\_finseq\_2 (u1\_struct\_0 X0)) (u1\_struct\_0 X0)))))) \Rightarrow ((X3 = k1\_funct\_1 (u1\_unialg\_1 X0) X2) \Rightarrow \\ & (k1\_funct\_1 X1 X2 = k19\_margrel1 X3)))))))))) \quad (2) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_unialg\_1 X0) \wedge ((v3\_unialg\_1 X0) \wedge ((v4\_unialg\_1 X0) \wedge (l1\_unialg\_1 X0)))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v2\_unialg\_1 X1) \wedge ((v3\_unialg\_1 X1) \wedge ((v4\_unialg\_1 X1) \wedge (l1\_unialg\_1 X1)))))) \Rightarrow ((r1\_unialg\_2 X0 X1) \Leftrightarrow (k1\_unialg\_1 X0 = k1\_unialg\_1 X1))) \quad (3) \end{aligned}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (v2\_unialg\_1 X0) \wedge ((v3\_unialg\_1 \\ & \quad X0) \wedge ((v4\_unialg\_1 X0) \wedge (l1\_unialg\_1 X0)))) \Rightarrow (\forall X1. ((\neg \\ v2\_struct\_0 X1) \wedge ((v2\_unialg\_1 X1) \wedge (v3\_unialg\_1 X1) \wedge ((v4\_unialg\_1 \\ X1) \wedge (l1\_unialg\_1 X1)))) \Rightarrow ((r1\_unialg\_2 X0 X1) \Rightarrow (k3\_finseq\_1 \\ (u1\_unialg\_1 X0) = k3\_finseq\_1 (u1\_unialg\_1 X1)))) \end{aligned}$$