l37_group_1 (TMSVAeXqSFoLdpJBxhh4h5DjEsZG7SN8434)

October 27, 2020

Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_group\_1 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k5\_group\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_group\_1 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (((k6\_algstr\_0\ X0\ X1\ X2 = X1) \vee (k6\_algstr\_0\ X0\ X2\ X1 = X1)) \Rightarrow (X2 = k1\_group\_1\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o.((X0\ k6\_numbers) \wedge (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((X0\ X1) \Rightarrow (X0\ (k1\_nat\_1\ X1\ np\_\_1))))) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (X0\ X1)) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_group\_1\ X0\ k6\_numbers\ X1 = k1\_group\_1\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v2\_group\_1\ X1) \wedge ((v3\_group\_1\ X1) \wedge (l3\_algstr\_0\ X1)))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1)) \Rightarrow (k5\_group\_1\ X1\ (k1\_nat\_1\ X0\ np\_\_1)\ X2 = k6\_algstr\_0\ X1\ (k5\_group\_1\ X1\ X0\ X2)\ X2))) \tag{4}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0) \Rightarrow (m1\_subset\_1\ (k1\_group\_1\ X0)\ (u1\_struct\_0\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0)\Rightarrow((v2\_group\_1\ X0)\Leftrightarrow(\exists X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\wedge(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow((k6\_algstr\_0\ X0\ X2\ X1 = X2)\wedge((k6\_algstr\_0\ X0\ X1\ X2 = X2)\wedge(\exists X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\wedge((k6\_algstr\_0\ X0\ X2\ X3 = X1)\wedge(k6\_algstr\_0\ X0\ X3\ X2 = X1)))))))) \tag{6}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_group\_1\ X1)\wedge((v3\_group\_1\ X1)\wedge(l3\_algstr\_0\ X1))))\Rightarrow(k5\_group\_1\ X1\ X0\ (k1\_group\_1\ X1) = k1\_group\_1\ X1))$$