t17_groupp_1 (TMGwhniCBggdzcygAti52MXRrWzmEWGH5Lu)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_int\_2 : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v8\_struct\_0 : \iota \Rightarrow o$ 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 $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_groupp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_group\_10 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_nat\_d : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $r1\_int\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_group\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_group\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $k7\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v6\_membered : \iota \Rightarrow o$ be given. Let $v1\_card\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((v7\_ordinal1\ X1) \wedge (v1\_int\_2\ X1)) \Rightarrow (\forall X2.((v7\_ordinal1\ X2) \wedge (v1\_int\_2\ X2)) \Rightarrow ((r1\_nat\_d\ X2\ (k1\_newton\ X1\ X0)) \Rightarrow (X2 = X1)))) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((v7\_ordinal1\ X1) \wedge (v1\_int\_2\ X1)) \Rightarrow (\neg(\forall X2.(v7\_ordinal1\ X2) \Rightarrow (X0 \neq k1\_newton\ X1\ X2)) \wedge (\forall X2.(m1\_subset\_1\ X2\ k5\_numbers) \Rightarrow (\neg(v1\_int\_2\ X2) \wedge ((r1\_int\_1\ X2\ X0) \wedge (X2 \neq X1)))))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v8\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0))))) \Rightarrow (\forall X1.((v7\_ordinal1\ X1) \wedge (v1\_int\_2\ X1)) \Rightarrow (\neg(r1\_nat\_d\ X1\ (k7\_group\_1\ X0)) \wedge (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (k6\_group\_1\ X0\ X2 \neq X1)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0) \wedge (v7\_ordinal1\ X1)) \Rightarrow (r1\_nat\_d\ X0\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(v7\_ordinal1\ X1))\Rightarrow((r1\_nat\_d\ X0\ X1)\Leftrightarrow(r1\_int\_1\ X0\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.((v8\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(k7\_group\_1\ X0 = k7\_struct\_0\ X0) \tag{6}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{7}$$

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(v7\_ordinal1\ X1))\Rightarrow(v7\_ordinal1\ (k1\_newton\ X0\ X1)) \tag{9}$$

Assume the following.

$$\forall X0.((v8\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow((v7\_ordinal1\ (k7\_struct\_0\ X0))\wedge(v1\_card\_1\ (k7\_struct\_0\ X0))) \tag{10}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{11}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_group\_1\ X1)\wedge((v3\_group\_1\ X1)\wedge(l3\_algstr\_0\ X1))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1))\Rightarrow((v1\_groupp\_1\ X2\ X0\ X1)\Leftrightarrow(\exists X3.(v7\_ordinal1\ X3)\wedge(k6\_group\_1\ X1\ X2 = k1\_newton\ X0\ X3))))) \tag{12}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_group\_1\ X1)\wedge((v3\_group\_1\ X1)\wedge(l3\_algstr\_0\ X1))))\Rightarrow((v2\_group\_10\ X1\ X0)\Leftrightarrow(\exists X2.(v7\_ordinal1\ X2)\wedge(k7\_struct\_0\ X1 = k1\_newton\ X0\ X2)))) \tag{13}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v7\_ordinal1\ X1)) \tag{14}$$

Theorem 1

$$\forall X0.((v7\_ordinal1\ X0)\wedge(v1\_int\_2\ X0))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v8\_struct\_0\ X1)\wedge((v2\_group\_1\ X1)\wedge((v3\_group\_1\ X1)\wedge(l3\_algstr\_0\ X1)))))\Rightarrow((\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1))\Rightarrow(v1\_groupp\_1\ X2\ X0\ X1))\Rightarrow(v2\_group\_10\ X1\ X0)))$$