t48_genealg1 (TMXt14CqEKrKpbvX9z8U2mTwDdASjNi5Mdr)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v2\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $m1\_genealg1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k11\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_genealg1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k5\_numbers) \Rightarrow (\forall X2.((\neg v1\_xboole\_0\ X2) \wedge ((v1\_relat\_1\ X2) \wedge ((v2\_relat\_1\ X2) \wedge ((v1\_funct\_1\ X2) \wedge (v1\_finseq\_1\ X2)))))) \Rightarrow (\forall X3.(m1\_genealg1\ X3\ X2) \Rightarrow (\forall X4.(m1\_genealg1\ X4\ X2) \Rightarrow ((r1\_xxreal\_0\ (k3\_finseq\_1\ X3)\ X0) \Rightarrow (k8\_genealg1\ X2\ X3\ X4\ X0\ X1 = k7\_genealg1\ X2\ X3\ X4\ X1))))))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k5\_numbers) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ k5\_numbers) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ k5\_numbers) \Rightarrow (\forall X5.((\neg v1\_xboole\_0\ X5) \wedge ((v1\_relat\_1\ X5) \wedge ((v2\_relat\_1\ X5) \wedge ((v1\_funct\_1\ X5) \wedge (v1\_finseq\_1\ X5))))) \Rightarrow (\forall X6.(m1\_genealg1\ X6\ X5) \Rightarrow (\forall X7.(m1\_genealg1\ X7\ X5) \Rightarrow (((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X0) \Rightarrow (k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k10\_genealg1\ X5\ X6\ X7\ X1\ X2\ X3\ X4)) \wedge (((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X1) \Rightarrow (k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k10\_genealg1\ X5\ X6\ X7\ X0\ X2\ X3\ X4)) \wedge (((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X2) \Rightarrow (k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k10\_genealg1\ X5\ X6\ X7\ X0\ X1\ X3\ X4)) \wedge (((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X3) \Rightarrow (k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k10\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X4)) \wedge ((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X4) \Rightarrow (k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k10\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3)))))))))))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k5\_numbers)\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ k5\_numbers)\Rightarrow(\forall X4.((\neg v1\_xboole\_0\ X4)\wedge((v1\_relat\_1\ X4)\wedge((v2\_relat\_1\ X4)\wedge((v1\_funct\_1\ X4)\wedge(v1\_finseq\_1\ X4)))))\Rightarrow(\forall X5.(m1\_genealg1\ X5\ X4)\Rightarrow(\forall X6.(m1\_genealg1\ X6\ X4)\Rightarrow(((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X0)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X1)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X2)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X3))))\Rightarrow(k10\_genealg1\ X4\ X5\ X6\ X0\ X1\ X2\ X3 = X5)))))))) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k5\_numbers)\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ k5\_numbers)\Rightarrow(\forall X4.((\neg v1\_xboole\_0\ X4)\wedge((v1\_relat\_1\ X4)\wedge((v2\_relat\_1\ X4)\wedge((v1\_funct\_1\ X4)\wedge(v1\_finseq\_1\ X4)))))\Rightarrow(\forall X5.(m1\_genealg1\ X5\ X4)\Rightarrow(\forall X6.(m1\_genealg1\ X6\ X4)\Rightarrow((((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X0)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X1))\Rightarrow(k10\_genealg1\ X4\ X5\ X6\ X0\ X1\ X2\ X3 = k8\_genealg1\ X4\ X5\ X6\ X2\ X3))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X0)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X2))\Rightarrow(k10\_genealg1\ X4\ X5\ X6\ X0\ X1\ X2\ X3 = k8\_genealg1\ X4\ X5\ X6\ X1\ X3))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X0)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X3))\Rightarrow(k10\_genealg1\ X4\ X5\ X6\ X0\ X1\ X2\ X3 = k8\_genealg1\ X4\ X5\ X6\ X1\ X2))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X1)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X2))\Rightarrow(k10\_genealg1\ X4\ X5\ X6\ X0\ X1\ X2\ X3 = k8\_genealg1\ X4\ X5\ X6\ X0\ X3))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X1)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X3))\Rightarrow(k10\_genealg1\ X4\ X5\ X6\ X0\ X1\ X2\ X3 = k8\_genealg1\ X4\ X5\ X6\ X0\ X2))\wedge(((r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X2)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X5)\ X3))\Rightarrow(k10\_genealg1\ X4\ X5\ X6\ X0\ X1\ X2\ X3 = k8\_genealg1\ X4\ X5\ X6\ X0\ X1)))))))))))) \tag{4}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow(\forall X2.((\neg v1\_xboole\_0\ X2)\wedge((v1\_relat\_1\ X2)\wedge((v2\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_finseq\_1\ X2)))))\Rightarrow(\forall X3.(m1\_genealg1\ X3\ X2)\Rightarrow(\forall X4.(m1\_genealg1\ X4\ X2)\Rightarrow(((r1\_xxreal\_0\ (k3\_finseq\_1\ X3)\ X0)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X3)\ X1))\Rightarrow(k8\_genealg1\ X2\ X3\ X4\ X0\ X1 = X3)))))) \tag{5}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow(\forall X2.((\neg v1\_xboole\_0\ X2)\wedge((v1\_relat\_1\ X2)\wedge((v2\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_finseq\_1\ X2)))))\Rightarrow(\forall X3.(m1\_genealg1\ X3\ X2)\Rightarrow(\forall X4.(m1\_genealg1\ X4\ X2)\Rightarrow((r1\_xxreal\_0\ (k3\_finseq\_1\ X3)\ X0)\Rightarrow(k8\_genealg1\ X2\ X3\ X4\ X1\ X0 = k7\_genealg1\ X2\ X3\ X4\ X1))))))) \tag{6}$$

Assume the following.

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

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k5\_numbers)\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ k5\_numbers)\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ k5\_numbers)\Rightarrow(\forall X5.((\neg v1\_xboole\_0\ X5)\wedge((v1\_relat\_1\ X5)\wedge((v2\_relat\_1\ X5)\wedge((v1\_funct\_1\ X5)\wedge(v1\_finseq\_1\ X5)))))\Rightarrow(\forall X6.(m1\_genealg1\ X6\ X5)\Rightarrow(\forall X7.(m1\_genealg1\ X7\ X5)\Rightarrow((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X0)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X1)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X2)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X3\ X4))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X0)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X1)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X3)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X2\ X4))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X0)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X1)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X4)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X2\ X3))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X0)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X2)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X3)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X1\ X4))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X0)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X2)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X4)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X1\ X3))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X0)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X3)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X4)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X1\ X2))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X1)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X2)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X3)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X0\ X4))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X1)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X2)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X4)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X0\ X3))\wedge((((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X1)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X3)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X4)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X0\ X2))\wedge(((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X2)\wedge((r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X3)\wedge(r1\_xxreal\_0\ (k3\_finseq\_1\ X6)\ X4)))\Rightarrow(k11\_genealg1\ X5\ X6\ X7\ X0\ X1\ X2\ X3\ X4 = k8\_genealg1\ X5\ X6\ X7\ X0\ X1))))))))))))))))$$