t4_real_ns1 (TMXaB2CGPE4PVSSCbsnoUyZCNYC75Q2PadY)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_real\_ns1 : \iota \Rightarrow \iota$ be given. Let $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k1\_euclid : \iota \Rightarrow \iota$ be given. Let $k4\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k1\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v5\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v6\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v7\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v8\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $l1\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $k1\_real\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k24\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k30\_valued\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $v3\_normsp\_0 : \iota \Rightarrow o$ be given. Let $v4\_normsp\_0 : \iota \Rightarrow o$ be given. Let $v1\_normsp\_1 : \iota \Rightarrow o$ be given. Let $v2\_normsp\_1 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $l1\_normsp\_1 : \iota \Rightarrow o$ be given. Let $l2\_normsp\_0 : \iota \Rightarrow o$ be given. Let $v1\_valued\_0 : \iota \Rightarrow o$ be given. Let $v3\_valued\_0 : \iota \Rightarrow o$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k4\_real\_ns1\ X0))) \Rightarrow (\forall X2.(m2\_finseq\_2\ X2\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\forall X3.(v1\_xreal\_0\ X3) \Rightarrow ((X1 = X2) \Rightarrow (k1\_rlvect\_1\ (k4\_real\_ns1\ X0)\ X1\ X3 = k9\_euclid\ X0\ X2\ X3))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v5\_rlvect\_1\ X0) \wedge ((v6\_rlvect\_1\ X0) \wedge ((v7\_rlvect\_1\ X0) \wedge ((v8\_rlvect\_1\ X0) \wedge (l1\_rlvect\_1\ X0)))))))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (k4\_algstr\_0\ X0\ X1 = k1\_rlvect\_1\ X0\ X1\ (k1\_real\_1\ np\_\_1))) \tag{2}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1)\wedge(m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers))\wedge((m1\_subset\_1\ np\_\_1\ k5\_numbers)\wedge(m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_2\ X1\ X0)\Rightarrow(\forall X2.(m2\_finseq\_2\ X2\ X0\ X1)\Leftrightarrow(m1\_subset\_1\ X2\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Leftrightarrow(m1\_finseq\_1\ X1\ X0) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7\_ordinal1\ X0)\wedge((m1\_subset\_1\ X1\ (k1\_euclid\ X0))\wedge(v1\_xreal\_0\ X2)))\Rightarrow(k9\_euclid\ X0\ X1\ X2 = k24\_valued\_1\ X1\ X2) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_euclid\ X0)))\Rightarrow(k6\_euclid\ X0\ X1 = k30\_valued\_1\ X1) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(k1\_real\_1\ X0 = k4\_xcmplx\_0\ X0) \tag{8}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((\neg v2\_struct\_0\ (k4\_real\_ns1\ X0))\wedge((v13\_algstr\_0\ (k4\_real\_ns1\ X0))\wedge((v2\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v3\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v4\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v5\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v6\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v7\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v8\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v3\_normsp\_0\ (k4\_real\_ns1\ X0))\wedge((v4\_normsp\_0\ (k4\_real\_ns1\ X0))\wedge((v1\_normsp\_1\ (k4\_real\_ns1\ X0))\wedge(v2\_normsp\_1\ (k4\_real\_ns1\ X0))))))))))))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_2\ X1\ X0)\Rightarrow(\forall X2.(m2\_finseq\_2\ X2\ X0\ X1)\Rightarrow(m2\_finseq\_1\ X2\ X0)) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{11}$$

Assume the following.

$$\forall X0.(l1\_normsp\_1\ X0) \Rightarrow ((l1\_rlvect\_1\ X0) \wedge (l2\_normsp\_0\ X0)) \tag{12}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow ((\neg v2\_struct\_0\ (k4\_real\_ns1\ X0)) \wedge ((v1\_normsp\_1\ (k4\_real\_ns1\ X0)) \wedge (l1\_normsp\_1\ (k4\_real\_ns1\ X0)))) \tag{13}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (m1\_subset\_1\ (k1\_real\_1\ X0)\ k1\_numbers) \tag{14}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (m1\_finseq\_2\ (k1\_euclid\ X0)\ k1\_numbers) \tag{15}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_valued\_0\ X0))) \Rightarrow (k30\_valued\_1\ X0 = k24\_valued\_1\ X0\ (k4\_xcmplx\_0\ np\_\_1)) \tag{16}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v3\_valued\_0\ X0)) \Rightarrow ((v1\_relat\_1\ X0) \wedge (v1\_valued\_0\ X0)) \tag{17}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0) \Rightarrow (v5\_relat\_1\ X1\ X0) \tag{18}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v5\_relat\_1\ X0\ k1\_numbers)) \Rightarrow ((v1\_relat\_1\ X0) \wedge (v3\_valued\_0\ X0)) \tag{19}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xreal\_0\ X0) \tag{20}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k4\_real\_ns1\ X0))) \Rightarrow (\forall X2.(m2\_finseq\_2\ X2\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow ((X1 = X2) \Rightarrow (k4\_algstr\_0\ (k4\_real\_ns1\ X0)\ X1 = k6\_euclid\ X0\ X2))))$$