t2_matrixj2 (TMW6ycJbADLP1g9UzetsPtgvig5fARBhaBi)

October 27, 2020

Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v6\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v33\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $v5\_group\_1 : \iota \Rightarrow o$ be given. Let $v4\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v5\_vectsp\_1 : \iota \Rightarrow o$ 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 $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k12\_matrix\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_matrixj2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_laplace : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_group\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_matrix\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_finsop\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_matrix\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_group\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l5\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((\neg v6\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v33\_algstr\_0\ X1) \wedge ((v3\_group\_1\ X1) \wedge ((v5\_group\_1\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v4\_vectsp\_1\ X1) \wedge ((v5\_vectsp\_1\ X1) \wedge (l6\_algstr\_0\ X1)))))))))) \Rightarrow (\forall X2.((v1\_matrix\_2\ X2\ X0\ X1) \wedge (m1\_matrix\_1\ X2\ (u1\_struct\_0\ X1)\ X0\ X0)) \Rightarrow (k12\_matrix\_3\ X0\ X1\ X2 = k1\_finsop\_1\ (u1\_struct\_0\ X1)\ (k13\_matrix\_3\ X0\ X1\ X2)\ (u2\_algstr\_0\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((\neg v6\_struct\_0\ X1)\wedge((v13\_algstr\_0\ X1)\wedge((v33\_algstr\_0\ X1)\wedge((v3\_group\_1\ X1)\wedge((v5\_group\_1\ X1)\wedge((v2\_rlvect\_1\ X1)\wedge((v3\_rlvect\_1\ X1)\wedge((v4\_rlvect\_1\ X1)\wedge((v4\_vectsp\_1\ X1)\wedge((v5\_vectsp\_1\ X1)\wedge(l6\_algstr\_0\ X1))))))))))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1))\Rightarrow(k3\_group\_4\ X1\ (k5\_finseq\_2\ (u1\_struct\_0\ X1)\ X0\ X2) = k1\_laplace\ X1\ (k4\_group\_1\ X1)\ X2\ X0)))) \tag{2}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((\neg v6\_struct\_0\ X1)\wedge((v13\_algstr\_0\ X1)\wedge((v33\_algstr\_0\ X1)\wedge((v3\_group\_1\ X1)\wedge((v5\_group\_1\ X1)\wedge((v4\_vectsp\_1\ X1)\wedge((v5\_vectsp\_1\ X1)\wedge((v2\_rlvect\_1\ X1)\wedge((v3\_rlvect\_1\ X1)\wedge((v4\_rlvect\_1\ X1)\wedge(l6\_algstr\_0\ X1))))))))))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1))\Rightarrow(k13\_matrix\_3\ X0\ X1\ (k2\_matrixj2\ X1\ X2\ X0) = k5\_finseq\_2\ (u1\_struct\_0\ X1)\ X0\ X2))) \tag{3}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0)\Rightarrow((l4\_algstr\_0\ X0)\wedge(l4\_struct\_0\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0)\Rightarrow((l3\_struct\_0\ X0)\wedge(l3\_algstr\_0\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0)\wedge((\neg v6\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v33\_algstr\_0\ X0)\wedge((v3\_group\_1\ X0)\wedge((v5\_group\_1\ X0)\wedge((v4\_vectsp\_1\ X0)\wedge((v5\_vectsp\_1\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge(l6\_algstr\_0\ X0))))))))))))\wedge((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\wedge(v7\_ordinal1\ X2)))\Rightarrow((v1\_matrix\_2\ (k2\_matrixj2\ X0\ X1\ X2)\ X2\ X0)\wedge(m1\_matrix\_1\ (k2\_matrixj2\ X0\ X1\ X2)\ (u1\_struct\_0\ X0)\ X2\ X2)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7\_ordinal1\ X0)\wedge(((\neg v2\_struct\_0\ X1)\wedge((\neg v6\_struct\_0\ X1)\wedge((v13\_algstr\_0\ X1)\wedge((v33\_algstr\_0\ X1)\wedge((v3\_group\_1\ X1)\wedge((v5\_group\_1\ X1)\wedge((v2\_rlvect\_1\ X1)\wedge((v3\_rlvect\_1\ X1)\wedge((v4\_rlvect\_1\ X1)\wedge((v4\_vectsp\_1\ X1)\wedge((v5\_vectsp\_1\ X1)\wedge(l6\_algstr\_0\ X1))))))))))))\wedge(m1\_matrix\_1\ X2\ (u1\_struct\_0\ X1)\ X0\ X0)))\Rightarrow(m2\_finseq\_1\ (k13\_matrix\_3\ X0\ X1\ X2)\ (u1\_struct\_0\ X1)) \tag{8}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l3\_algstr\_0\ X0))\Rightarrow(\forall X1.\ (m2\_finseq\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(k3\_group\_4\ X0\ X1 = k1\_finsop\_1\ (u1\_struct\_0\ X0)\ X1\ (u2\_algstr\_0\ X0))) \tag{9}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((\neg v6\_struct\_0\ X1)\wedge((v13\_algstr\_0\ X1)\wedge((v33\_algstr\_0\ X1)\wedge((v3\_group\_1\ X1)\wedge((v5\_group\_1\ X1)\wedge((v4\_vectsp\_1\ X1)\wedge((v5\_vectsp\_1\ X1)\wedge((v2\_rlvect\_1\ X1)\wedge((v3\_rlvect\_1\ X1)\wedge((v4\_rlvect\_1\ X1)\wedge(l6\_algstr\_0\ X1))))))))))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1))\Rightarrow(k12\_matrix\_3\ X0\ X1\ (k2\_matrixj2\ X1\ X2\ X0) = k1\_laplace\ X1\ (k4\_group\_1\ X1)\ X2\ X0)))$$