t41_matrix14 (TMWr9rEcmnyLD6hNGJHjLfo7BLpHX9TT7PZ)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ 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 $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ 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 $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m1\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k3\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_matrix\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_matrix\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $l4\_struct\_0 : \iota \Rightarrow o$ be given. Let $v9\_struct\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ 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 $l3\_struct\_0 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((\neg v6\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v33\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v3\_group\_1\ X1) \wedge ((v5\_group\_1\ X1) \wedge ((v4\_vectsp\_1\ X1) \wedge ((v5\_vectsp\_1\ X1) \wedge (l6\_algstr\_0\ X1))))))))))) \Rightarrow (\forall X2.(m1\_matrix\_1\ X2\ (u1\_struct\_0\ X1)\ X0\ X0) \Rightarrow (\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers) \wedge ((k3\_matrix\_1\ (u1\_struct\_0\ X1)\ X2\ np\_\_1\ np\_\_1 \neq k4\_struct\_0\ X1) \wedge (\forall X3.(m1\_matrix\_1\ X3\ (u1\_struct\_0\ X1)\ X0\ X0) \Rightarrow (\neg(v1\_matrix\_6\ X3\ X0\ X1) \wedge ((k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ X3\ X2)\ np\_\_1\ np\_\_1 = k5\_struct\_0\ X1) \wedge ((\forall X4.(m1\_subset\_1\ X4\ k5\_numbers) \Rightarrow ((r1\_xxreal\_0\ X4\ X0) \Rightarrow ((r1\_xxreal\_0\ X4\ np\_\_1) \vee (k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ X3\ X2)\ X4\ np\_\_1 = k4\_struct\_0\ X1)))) \wedge (\forall X4.(m1\_subset\_1\ X4\ k5\_numbers) \Rightarrow (((r1\_xxreal\_0\ X4\ X0) \wedge (k3\_matrix\_1\ (u1\_struct\_0\ X1)\ X2\ np\_\_1\ X4 = k4\_struct\_0\ X1)) \Rightarrow ((r1\_xxreal\_0\ X4\ np\_\_1) \vee (k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ X3\ X2)\ np\_\_1\ X4 = k4\_struct\_0\ X1)))))))))))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((\neg v6\_struct\_0\ X1)\wedge((v13\_algstr\_0\ X1)\wedge((v33\_algstr\_0\ X1)\wedge((v2\_rlvect\_1\ X1)\wedge((v3\_rlvect\_1\ X1)\wedge((v4\_rlvect\_1\ X1)\wedge((v3\_group\_1\ X1)\wedge((v5\_group\_1\ X1)\wedge((v4\_vectsp\_1\ X1)\wedge((v5\_vectsp\_1\ X1)\wedge(l6\_algstr\_0\ X1))))))))))\Rightarrow(\forall X2.(m1\_matrix\_1\ X2\ (u1\_struct\_0\ X1)\ X0\ X0)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers)\wedge((k3\_matrix\_1\ (u1\_struct\_0\ X1)\ X2\ np\_\_1\ np\_\_1\neq k4\_struct\_0\ X1)\wedge(\forall X3.(m1\_matrix\_1\ X3\ (u1\_struct\_0\ X1)\ X0\ X0)\Rightarrow(\neg(v1\_matrix\_6\ X3\ X0\ X1)\wedge((k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ X2\ X3)\ np\_\_1\ np\_\_1 = k5\_struct\_0\ X1)\wedge((\forall X4.(m1\_subset\_1\ X4\ k5\_numbers)\Rightarrow((r1\_xxreal\_0\ X4\ X0)\Rightarrow((r1\_xxreal\_0\ X4\ np\_\_1)\vee(k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ X2\ X3)\ np\_\_1\ X4 = k4\_struct\_0\ X1))))\wedge(\forall X4.(m1\_subset\_1\ X4\ k5\_numbers)\Rightarrow(((r1\_xxreal\_0\ X4\ X0)\wedge(k3\_matrix\_1\ (u1\_struct\_0\ X1)\ X2\ X4\ np\_\_1 = k4\_struct\_0\ X1))\Rightarrow((r1\_xxreal\_0\ X4\ np\_\_1)\vee(k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ X2\ X3)\ X4\ np\_\_1 = k4\_struct\_0\ X1))))))))))) \tag{2}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{3}$$

Assume the following.

$$\forall X0.((\neg v6\_struct\_0\ X0)\wedge(l4\_struct\_0\ X0))\Rightarrow(\neg v9\_struct\_0\ (k5\_struct\_0\ X0)\ X0) \tag{4}$$

Assume the following.

$$\forall X0.(l2\_struct\_0\ X0)\Rightarrow(v9\_struct\_0\ (k4\_struct\_0\ X0)\ X0) \tag{5}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0)\Rightarrow((l4\_algstr\_0\ X0)\wedge(l4\_struct\_0\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.(l4\_struct\_0\ X0)\Rightarrow((l2\_struct\_0\ X0)\wedge(l3\_struct\_0\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v7\_ordinal1\ X0)\wedge(((\neg v2\_struct\_0\ X1)\wedge((\neg v6\_struct\_0\ X1)\wedge((v13\_algstr\_0\ X1)\wedge((v33\_algstr\_0\ X1)\wedge((v3\_group\_1\ X1)\wedge((v5\_group\_1\ X1)\wedge((v2\_rlvect\_1\ X1)\wedge((v3\_rlvect\_1\ X1)\wedge((v4\_rlvect\_1\ X1)\wedge((v4\_vectsp\_1\ X1)\wedge((v5\_vectsp\_1\ X1)\wedge(l6\_algstr\_0\ X1))))))))))))\wedge((m1\_matrix\_1\ X2\ (u1\_struct\_0\ X1)\ X0\ X0)\wedge(m1\_matrix\_1\ X3\ (u1\_struct\_0\ X1)\ X0\ X0))))\Rightarrow(m1\_matrix\_1\ (k4\_matrix\_6\ X0\ X1\ X2\ X3)\ (u1\_struct\_0\ X1)\ X0\ X0) \tag{9}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1) \Rightarrow (v7\_ordinal1\ X0) \tag{10}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((\neg v6\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v33\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v3\_group\_1\ X1) \wedge ((v5\_group\_1\ X1) \wedge ((v4\_vectsp\_1\ X1) \wedge ((v5\_vectsp\_1\ X1) \wedge (l6\_algstr\_0\ X1))))))))))) \Rightarrow (\forall X2.(m1\_matrix\_1\ X2\ (u1\_struct\_0\ X1)\ X0\ X0) \Rightarrow (\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers) \wedge ((k3\_matrix\_1\ (u1\_struct\_0\ X1)\ X2\ np\_\_1\ np\_\_1 \neq k4\_struct\_0\ X1) \wedge (\forall X3.(m1\_matrix\_1\ X3\ (u1\_struct\_0\ X1)\ X0\ X0) \Rightarrow (\forall X4.(m1\_matrix\_1\ X4\ (u1\_struct\_0\ X1)\ X0\ X0) \Rightarrow (\neg(v1\_matrix\_6\ X3\ X0\ X1) \wedge ((v1\_matrix\_6\ X4\ X0\ X1) \wedge ((k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ (k4\_matrix\_6\ X0\ X1\ X3\ X2)\ X4)\ np\_\_1\ np\_\_1 = k5\_struct\_0\ X1) \wedge ((\forall X5.(m1\_subset\_1\ X5\ k5\_numbers) \Rightarrow ((r1\_xxreal\_0\ X5\ X0) \Rightarrow ((r1\_xxreal\_0\ X5\ np\_\_1) \vee (k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ (k4\_matrix\_6\ X0\ X1\ X3\ X2)\ X4)\ X5\ np\_\_1 = k4\_struct\_0\ X1)))) \wedge (\forall X5.(m1\_subset\_1\ X5\ k5\_numbers) \Rightarrow ((r1\_xxreal\_0\ X5\ X0) \Rightarrow ((r1\_xxreal\_0\ X5\ np\_\_1) \vee (k3\_matrix\_1\ (u1\_struct\_0\ X1)\ (k4\_matrix\_6\ X0\ X1\ (k4\_matrix\_6\ X0\ X1\ X3\ X2)\ X4)\ np\_\_1\ X5 = k4\_struct\_0\ X1))))))))))))))$$