t43_matrix10 (TMR5mRDVTeQL7nHA7Pethjma7TMDLLUoBLh)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $m1\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $v4\_matrix10 : \iota \Rightarrow o$ be given. Let $k3\_matrix10 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_matrix10 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.(m1\_matrix\_1\ X2\ k1\_numbers\ X1\ X1) \Rightarrow (((r1\_xxreal\_0\ k6\_numbers\ X0) \wedge (v4\_matrix10\ X2)) \Rightarrow (v4\_matrix10\ (k5\_matrix10\ X1\ X0\ X2))))) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_matrix\_1\ X1\ k1\_numbers\ X0\ X0) \Rightarrow (\forall X2.(m1\_matrix\_1\ X2\ k1\_numbers\ X0\ X0) \Rightarrow (((v4\_matrix10\ X1) \wedge (v4\_matrix10\ X2)) \Rightarrow (v4\_matrix10\ (k3\_matrix10\ X0\ X1\ X2))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7\_ordinal1\ X0) \wedge ((m1\_subset\_1\ X1\ k1\_numbers) \wedge (m1\_matrix\_1\ X2\ k1\_numbers\ X0\ X0))) \Rightarrow (m1\_matrix\_1\ (k5\_matrix10\ X0\ X1\ X2)\ k1\_numbers\ X0\ X0) \tag{3}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (\forall X3.(m1\_matrix\_1\ X3\ k1\_numbers\ X2\ X2) \Rightarrow (\forall X4.(m1\_matrix\_1\ X4\ k1\_numbers\ X2\ X2) \Rightarrow (((r1\_xxreal\_0\ k6\_numbers\ X0) \wedge ((r1\_xxreal\_0\ k6\_numbers\ X1) \wedge ((v4\_matrix10\ X3) \wedge (v4\_matrix10\ X4)))) \Rightarrow (v4\_matrix10\ (k3\_matrix10\ X2\ (k5\_matrix10\ X2\ X0\ X3)\ (k5\_matrix10\ X2\ X1\ X4)))))))))$$