

t14_matrixr1
(TMEsXmxuPhikVQCajZJS8fZr2QZHaKY723g)

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Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k8_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k5_euclid : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k45_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ X1 k1_numbers) \Rightarrow ((k3_finseq_1 X0 = k3_finseq_1 X1) \Rightarrow (k6_rvsum_1 \\ (k8_rvsum_1 X0 X1) = k8_rvsum_1 X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (k8_rvsum_1 X0 (k5_euclid \\ (k3_finseq_1 X0)) = X0) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow ((k4_rvsum_1 X0 (k6_rvsum_1 \\ X0) = k5_euclid (k3_finseq_1 X0)) \wedge (k8_rvsum_1 X0 X0 = k5_euclid \\ (k3_finseq_1 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 \\ X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 \\ X1) \wedge ((v3_valued_0 X1) \wedge (v1_finseq_1 X1)))) \Rightarrow (k8_rvsum_1 X0 (k6_rvsum_1 \\ X1) = k4_rvsum_1 X0 X1)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2.(m2_finseq_1 X2 k1_numbers) \Rightarrow (((k3_finseq_1 \\ & X0 = k3_finseq_1 X1) \wedge (k3_finseq_1 X1 = k3_finseq_1 X2) \Rightarrow (k4_rvsum_1 \\ & X0 (k8_rvsum_1 X1 X2) = k8_rvsum_1 (k4_rvsum_1 X0 X1) X2)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((\\ & v3_valued_0 X0) \wedge (v1_finseq_1 X0)))) \wedge ((v1_relat_1 X1) \wedge ((v1_funct_1 \\ & X1) \wedge ((v3_valued_0 X1) \wedge (v1_finseq_1 X1)))))) \Rightarrow (k8_rvsum_1 X0 X1 = \\ & k45_valued_1 X0 X1) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((\\ & v1_valued_0 X0) \wedge (v1_finseq_1 X0)))) \wedge ((v1_relat_1 X1) \wedge ((v1_funct_1 \\ & X1) \wedge ((v1_valued_0 X1) \wedge (v1_finseq_1 X1)))))) \Rightarrow ((v1_relat_1 (k45_valued_1 \\ & X0 X1)) \wedge ((v1_funct_1 (k45_valued_1 X0 X1)) \wedge (v1_finseq_1 (k45_valued_1 \\ & X0 X1)))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_valued_0 \\ & X0))) \wedge ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v3_valued_0 X1)))) \Rightarrow \\ & ((v1_relat_1 (k45_valued_1 X0 X1)) \wedge ((v1_funct_1 (k45_valued_1 \\ & X0 X1)) \wedge (v3_valued_0 (k45_valued_1 X0 X1)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge (\\ & (v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & X0)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (\\ (v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \quad (11)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v3_valued_0 X0)) \Rightarrow ((v1_relat_1 \\ X0) \wedge (v1_valued_0 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k1_numbers) \Rightarrow (v3_valued_0 X0) \quad (13)$$

Theorem 1

$$\forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 X1 k1_numbers) \Rightarrow ((k3_finseq_1 X0 = k3_finseq_1 X1) \Rightarrow (X0 = k8_rsum_1 (k4_rsum_1 X0 X1) X1)))$$