

t15_matrixr1 (TMdBmCRkoKw73v721fn4ncj5RPEo5Z1DqV2)

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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 $k4_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_euclid : \iota \Rightarrow \iota$ be given. Let $k6_rvsum_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (k8_rvsum_1 X0 (k5_euclid (k3_finseq_1 X0)) = X0) \quad (1)$$

Assume the following.

$$\forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow ((k4_rvsum_1 X0 (k6_rvsum_1 X0) = k5_euclid (k3_finseq_1 X0)) \wedge (k8_rvsum_1 X0 X0 = k5_euclid (k3_finseq_1 X0))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 X1 k1_numbers) \Rightarrow (\forall X2.(m2_finseq_1 X2 k1_numbers) \Rightarrow (((k3_finseq_1 X0 = k3_finseq_1 X1) \wedge (k3_finseq_1 X1 = k3_finseq_1 X2)) \Rightarrow (k8_rvsum_1 X0 (k8_rvsum_1 X1 X2) = k4_rvsum_1 (k8_rvsum_1 X0 X1) X2)))) \end{aligned} \quad (3)$$

Theorem 1

$$\forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 X1 k1_numbers) \Rightarrow ((k3_finseq_1 X0 = k3_finseq_1 X1) \Rightarrow (X0 = k4_rvsum_1 (k8_rvsum_1 X0 X1) X1)))$$