

t6_integra3

(TMSg1y2zfm6DRtCoCNXMYHmxrLuNAwzSZoD)

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Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $v5_valued_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ X1))) \Rightarrow (((k10_xtuple_0 X0 = k10_xtuple_0 X1) \wedge ((v2_funct_1 X0) \wedge \\ (v2_funct_1 X1))) \Rightarrow (k3_finseq_1 X0 = k3_finseq_1 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ X1 k1_numbers) \Rightarrow (((k3_finseq_1 X0 = k3_finseq_1 X1) \wedge ((k1_rvsum_1 \\ X0 = k1_rvsum_1 X1) \wedge ((v5_valued_0 X0) \wedge (v5_valued_0 X1)))) \Rightarrow (X0 = \\ X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (3)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v3_valued_0 X0)) \Rightarrow (k1_rvsum_1 X0 = k10_xtuple_0 X0) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \quad (5)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k1_numbers) \Rightarrow (v3_valued_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 X0) \wedge ((v5_valued_0 X0) \wedge (v1_finseq_1 X0)))))) \Rightarrow ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v2_funct_1 X0) \wedge ((v3_valued_0 X0) \wedge (v1_finseq_1 X0))))) \quad (7)$$

Theorem 1

$$\forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow (\forall X1.(m2_finseq_1 X1 k1_numbers) \Rightarrow (((k1_rsum_1 X0 = k1_rsum_1 X1) \wedge ((v5_valued_0 X0) \wedge (v5_valued_0 X1))) \Rightarrow (X0 = X1)))$$