

t10_int_6

(TMb4ctQhWVPHtKjLuEGDVhhBNLHq9BpGqW8)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_numbers : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v5_relat_1 X0 k4_numbers) \wedge ((v1_funct_1 \\ X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X1 \in \\ k4_finseq_1 X0) \Rightarrow ((k1_funct_1 X0 X1 = k6_numbers) \vee (v1_int_1 (k7_xcmplx_0 \\ (k19_rvsum_1 X0) (k1_funct_1 X0 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v1_finseq_1 \\ X0) \wedge (v1_valued_0 X0)))) \Rightarrow ((\exists X1.(v7_ordinal1 X1) \wedge ((X1 \in \\ k4_finseq_1 X0) \wedge (k1_funct_1 X0 X1 = k6_numbers))) \Rightarrow (k19_rvsum_1 \\ X0 = k6_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 np_1 X0 = X0) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 X0 k6_numbers = k6_numbers) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v1_xcmplx_0 X0) \wedge ((v1_xcmplx_0 \\ X1) \wedge (v1_xcmplx_0 X2))) \Rightarrow (k3_xcmplx_0 (k3_xcmplx_0 X0 X1) X2 = k3_xcmplx_0 \\ X0 (k3_xcmplx_0 X1 X2)) \end{aligned} \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v5_relat_1 X0 k4_numbers) \wedge ((v1_funct_1 \\ X0) \wedge (v1_finseq_1 X0)))) \Rightarrow ((v1_xcmplx_0 (k19_rvsum_1 X0)) \wedge (v1_int_1 \\ (k19_rvsum_1 X0))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 \\ X0))) \Rightarrow (v1_xcmplx_0 (k1_funct_1 X0 X1)) \quad (8)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k5_xcmplx_0 X0)) \quad (9)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow (k7_xcmplx_0 \\ X0 X1 = k3_xcmplx_0 X0 (k5_xcmplx_0 X1))) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_xcmplx_0 X0) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow ((\\ (X0 \neq k6_numbers) \Rightarrow ((X1 = k5_xcmplx_0 X0) \Leftrightarrow (k3_xcmplx_0 X0 X1 = np_1))) \wedge \\ ((X0 = k6_numbers) \Rightarrow ((X1 = k5_xcmplx_0 X0) \Leftrightarrow (X1 = k6_numbers)))))) \wedge \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (\\ k3_xcmplx_0 X0 X1 = k3_xcmplx_0 X1 X0) \quad (12)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v3_valued_0 X0)) \Rightarrow ((v1_relat_1 \\ X0) \wedge (v1_valued_0 X0)) \quad (13)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v5_relat_1 X0 k4_numbers)) \Rightarrow ((v1_relat_1 \\ X0) \wedge (v3_valued_0 X0)) \quad (14)$$

Theorem 1

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v5_relat_1 X0 k4_numbers) \wedge ((v1_funct_1 \\ X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (\forall X1. (v7_ordinal1 X1) \Rightarrow (\neg (X1 \in \\ k4_finseq_1 X0) \wedge (\forall X2. (v1_int_1 X2) \Rightarrow (k3_xcmplx_0 X2 (k1_funct_1 \\ X0 X1) \neq k19_rvsum_1 X0)))))) \end{aligned}$$