

t8_integra3 (TMGjV- FuiedQQkCY3xxKgzzRgblhMBPLweJj)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_measure5 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_integral : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_integral : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13_integral : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_valued_0 : \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ 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 $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_rcomp_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow ((v5_valued_0 X0) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 k1_numbers k5_numbers) \Rightarrow (((X1 \in k4_finseq_1 X0) \wedge ((X2 \in k4_finseq_1 \\ & X0) \wedge (r1_xxreal_0 X1 X2))) \Rightarrow (r1_xxreal_0 (k1_seq_1 X0 X1) (k1_seq_1 \\ & X0 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow (k4_finseq_1 X0 = k9_xtuple_0 X0) \quad (5)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1)\wedge(v3_ordinal1 k4_ordinal1) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0)\wedge((v1_rcomp_1 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))))\Rightarrow(\forall X1.(m1_integral X1 X0)\Rightarrow((\neg v1_xboole_0 X1)\wedge((v5_valued_0 X1)\wedge(m2_finseq_1 X1 k1_numbers)))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge(v1_funct_1 X1)\wedge(v1_finseq_1 X1)) \quad (9)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1_xboole_0 X0)\wedge((v2_measure5 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))))\wedge((m1_integral X1 X0)\wedge((m1_integral X2 X0)\wedge(v7_ordinal1 X3))))\Rightarrow(m2_subset_1 (k13_integral X0 X1 X2 X3) k1_numbers k5_numbers) \quad (11)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v4_relat_1 X0 k5_numbers)\wedge((v5_relat_1 X0 k1_numbers)\wedge(v1_funct_1 X0))))\Rightarrow((v5_valued_0 X0)\Leftrightarrow(\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers)\Rightarrow(\forall X2.(m2_subset_1 X2 k1_numbers k5_numbers)\Rightarrow(\neg(X1 \in k9_xtuple_0 X0)\wedge((X2 \in k9_xtuple_0 X0)\wedge((\neg r1_xreal_0 X2 X1)\wedge(r1_xreal_0 (k1_seq_1 X0 X2) (k1_seq_1 X0 X1)))))))) \quad (12)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0)\wedge((v2_measure5 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers))))\Rightarrow(\forall X1.(m1_integral X1 X0)\Rightarrow(\forall X2.(m1_integral X2 X0)\Rightarrow(\forall X3.(v7_ordinal1 X3)\Rightarrow((r1_integral X1 X2)\Rightarrow(\forall X4.(m2_subset_1 X4 k1_numbers k5_numbers)\Rightarrow(((X3 \in k4_finseq_1 X1)\Rightarrow((X4 = k13_integral X0 X1 X2 X3)\Leftrightarrow((X4 \in k4_finseq_1 X2)\wedge(k1_seq_1 X1 X3 = k1_seq_1 X2 X4))))\wedge((\neg X3 \in k4_finseq_1 X1)\Rightarrow((X4 = k13_integral X0 X1 X2 X3)\Leftrightarrow(X4 = k6_numbers)))))))))) \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (14)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 X0) \wedge \\ (v1_finseq_1 X0)))) \end{aligned} \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow (v5_relat_1 X1 X0) \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow ((v2_measure5 \\ X0) \Rightarrow (v1_rcomp_1 X0)) \end{aligned} \quad (17)$$

Theorem 1

$$\begin{aligned} \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\forall X2.((\neg v1_xboole_0 \\ X2) \wedge ((v2_measure5 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 k1_numbers)))) \Rightarrow \\ (\forall X3.(m1_integral X3 X2) \Rightarrow (\forall X4.(m1_integral X4 X2) \Rightarrow \\ (\neg(r1_integral X3 X4) \wedge ((X0 \in k4_finseq_1 X3) \wedge ((X1 \in k4_finseq_1 \\ X3) \wedge ((\neg r1_xxreal_0 X1 X0) \wedge (r1_xxreal_0 (k13_integral X2 X3 X4 \\ X1) (k13_integral X2 X3 X4 X0)))))))))) \end{aligned}$$