

t40_subset_1

(TMW3WU_{rj}NKV_{hx}AiE1_{rz}t7MR_{dn}L51MinF_oK_Q)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k6_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k2_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole.0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_subset.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. k2_enumset1 X0 X1 \quad (1)$$

$$X2 X3 = k2_xboole.0 (k1_tarski X0) (k1_enumset1 X1 X2 X3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \quad (2)$$

$$\forall X6. k6_enumset1 X0 X0 X1 X2 X3 X4 X5 X6 = k5_enumset1 X0 X1 X2 X3 X4 X5 X6$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset.1 X1 X0) \Rightarrow (\forall X2. (m1_subset.1 X2 X0) \Rightarrow ((X0 \neq k1_xboole.0) \Rightarrow (m1_subset.1 (k2_tarski X1 X2) (k1_zfmisc.1 X0)))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \quad (4)$$

$$k5_enumset1 X0 X0 X1 X2 X3 X4 X5 = k4_enumset1 X0 X1 X2 X3 X4 X5$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k1_enumset1 X0 X1 X2 = k2_xboole.0 (k1_tarski X0) (k2_tarski X1 X2) \quad (5)$$

Assume the following.

$$\forall X0. k2_tarski X0 X0 = k1_tarski X0 \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.\forall X7.k6_enumset1\ X0\ X1\ X2\ X3\ X4\ X5\ X6\ X7 = k2_xboole_0 \quad (7) \\ & (k2_tarski\ X0\ X1)\ (k4_enumset1\ X2\ X3\ X4\ X5\ X6\ X7) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & k4_enumset1\ X0\ X1\ X2\ X3\ X4\ X5 = k2_xboole_0\ (k2_tarski\ X0\ X1)\ (k2_enumset1 \\ & \quad X2\ X3\ X4\ X5) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1_subset_1\ X1\ (k1_zfmisc_1 \\ & X0))\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ X0)))\Rightarrow(k4_subset_1\ X0\ X1\ X2 = \\ & \quad k2_xboole_0\ X1\ X2) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.k2_enumset1\ X0\ X1 \\ & X2\ X3 = k2_xboole_0\ (k2_tarski\ X0\ X1)\ (k2_tarski\ X2\ X3) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1_subset_1\ X1\ (k1_zfmisc_1 \\ & X0))\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ X0)))\Rightarrow(m1_subset_1\ (k4_subset_1 \\ & \quad X0\ X1\ X2)\ (k1_zfmisc_1\ X0)) \end{aligned} \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(\forall X2.(m1_subset_1 \\ & X2\ X0)\Rightarrow(\forall X3.(m1_subset_1\ X3\ X0)\Rightarrow(\forall X4.(m1_subset_1 \\ & X4\ X0)\Rightarrow(\forall X5.(m1_subset_1\ X5\ X0)\Rightarrow(\forall X6.(m1_subset_1 \\ & X6\ X0)\Rightarrow(\forall X7.(m1_subset_1\ X7\ X0)\Rightarrow(\forall X8.(m1_subset_1 \\ & X8\ X0)\Rightarrow((X0\neq k1_xboole_0)\Rightarrow(m1_subset_1\ (k6_enumset1\ X1\ X2\ X3\ X4 \\ & \quad X5\ X6\ X7\ X8)\ (k1_zfmisc_1\ X0)))))))))) \end{aligned}$$