

l25_dtconstr
(TMGzUyNscvhpwzpmkWEPaCPZ9njv65nh59y)

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Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_lang1 : \iota \Rightarrow \iota$ be given. Let $k5_dtconstr : \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $c3_dtconstr : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k7_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ 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 $r1_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $c2_dtconstr : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((m1_subset_1 X1 X0) \wedge (m1_subset_1 X2 X0))) \Rightarrow (k7_domain_1 X0 X1 X2 = k2_tarski X1 X2) \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (8)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (9)$$

Assume the following.

$$\begin{aligned} k2_lang1\ k5_dtconstr = ReplSep\ (toset\ (\lambda X0 : \iota.m1_subset_1 \\ X0\ (u1_struct_0\ k5_dtconstr)))\ (\lambda X0 : \iota.\exists X1.((v1_relat_1 \\ X1)\wedge((v1_funct_1\ X1)\wedge(v1_finseq_1\ X1)))\wedge(r1_lang1\ k5_dtconstr \\ X0\ X1))\ (\lambda X0 : \iota.X0) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow (\neg r1_lang1\ k5_dtconstr\ c2_dtconstr\ X0) \quad (11)$$

Assume the following.

$$u1_struct_0\ k5_dtconstr = k7_domain_1\ k5_numbers\ k6_numbers\ np_1 \quad (12)$$

Assume the following.

$$(\neg v1_xboole_0\ k4_ordinal1)\wedge(v3_ordinal1\ k4_ordinal1) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.\neg v1_xboole_0\ (k2_tarski\ X0\ X1) \quad (14)$$

Assume the following.

$$m1_subset_1\ c3_dtconstr\ (u1_struct_0\ k5_dtconstr) \quad (15)$$

Assume the following.

$$c3_dtconstr = np_1 \quad (16)$$

Assume the following.

$$c2_dtconstr = k6_numbers \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (18)$$

Assume the following.

$$k1_xboole_0 = the (\lambda X0 : \iota.v1_xboole_0 X0) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (21)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_tarski X1 X0 \quad (22)$$

Theorem 1

$$r1_tarski (k2_lang1 k5_dtconstr) (k6_domain_1 (u1_struct_0 k5_dtconstr) c3_dtconstr)$$