

t8_bciideal

(TML2zRkm8AHdSUsLtERWPoJPFmUYRxT8m3a)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_bcialg_1 : \iota \Rightarrow o$ be given. Let $v4_bcialg_1 : \iota \Rightarrow o$ be given. Let $v5_bcialg_1 : \iota \Rightarrow o$ be given. Let $v7_bcialg_1 : \iota \Rightarrow o$ be given. Let $l2_bcialg_1 : \iota \Rightarrow o$ be given. Let $m2_bcialg_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_bciideal : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_bcialg_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\ & X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\ & (\forall X1.(m2_bcialg_1 X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (\\ & u1_struct_0 X0)) \Rightarrow (\forall X3.(m2_subset_1 X3 (u1_struct_0 X0) \\ & X1) \Rightarrow ((r1_bcialg_1 X0 X2 X3) \Rightarrow (X2 \in X1)))))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\ & X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\ & (\forall X1.(m2_bcialg_1 X1 X0) \Rightarrow ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow \\ & (X2 \in X1)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (k1_bciideal X0 \\
& X1 = ReplSep (toset (\lambda X2 : \iota.m1_subset_1 X2 (u1_struct_0 X0)) \\
& (\lambda X2 : \iota.r1_bcialg_1 X0 X2 X1) (\lambda X2 : \iota.X2))))
\end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\
& (\forall X1.(m2_bcialg_1 X1 X0) \Rightarrow (\forall X2.(m2_subset_1 X2 (\\
& u1_struct_0 X0) X1) \Rightarrow (r1_tarski (k1_bciideal X0 X2) X1)))
\end{aligned}$$