

t66_ideal_1

(TMYtvDA33P5P5MP1t2XErKFRk5J8nWsSGy2)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_ideal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_ideal_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_ideal_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_ideal_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (2)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_tarski X0) \quad (3)$$

Assume the following.

$$\forall X0. \exists X1. m1_subset_1 X1 X0 \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((\neg v1_xboole_0 \\ & (k7_ideal_1 X0 X1)) \wedge ((v1_ideal_1 (k7_ideal_1 X0 X1) X0) \wedge ((v2_ideal_1 \\ & (k7_ideal_1 X0 X1) X0) \wedge ((v3_ideal_1 (k7_ideal_1 X0 X1) X0) \wedge (m1_subset_1 \\ & (k7_ideal_1 X0 X1) (k1_zfmisc_1 (u1_struct_0 X0))))))) \quad (5) \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \quad (6)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((\neg v1_xboole_0 \\
& X1) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_ideal_1 X2 X0) \wedge ((v2_ideal_1 \\
& X2 X0) \wedge ((v3_ideal_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\
& X0)))))) \Rightarrow ((X2 = k7_ideal_1 X0 X1) \Leftrightarrow ((r1_tarski X1 X2) \wedge (\forall X3. \\
& ((\neg v1_xboole_0 X3) \wedge ((v1_ideal_1 X3 X0) \wedge ((v2_ideal_1 X3 X0) \wedge (\\
& (v3_ideal_1 X3 X0) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\
& X0)))))) \Rightarrow ((r1_tarski X1 X3) \Rightarrow (r1_tarski X2 X3)))))))))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (X1 \in k7_ideal_1 X0 (k6_domain_1 \\
& (u1_struct_0 X0) X1)))
\end{aligned}$$