

t95_ideal_1

(TMV2Nz7d9ieQSQLWB1HzALUBrMztW1aPv3E)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $v8_ideal_1 : \iota \Rightarrow o$ be given. Let $v6_ideal_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ 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. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v7_ideal_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_ideal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_ideal_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (1)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_tarski X0) \quad (2)$$

Assume the following.

$$\forall X0. v1_finset_1 (k1_tarski X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow ((v8_ideal_1 X0) \Leftrightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_ideal_1 X1 X0) \wedge ((v2_ideal_1 X1 X0) \wedge ((v3_ideal_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))))))) \Rightarrow (v7_ideal_1 X1 X0))) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v1_xboole_0 X1) \wedge ((v1_ideal_1 X1 X0) \wedge ((v2_ideal_1 X1 X0) \wedge \\ & (v3_ideal_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((v7_ideal_1 X1 X0) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (u1_struct_0 \\ & X0)) \wedge (X1 = k7_ideal_1 X0 (k6_domain_1 (u1_struct_0 X0) X2)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow ((v6_ideal_1 \\ & X0) \Leftrightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_ideal_1 X1 X0) \wedge ((v2_ideal_1 \\ & X1 X0) \wedge ((v3_ideal_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow (v5_ideal_1 X1 X0))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v1_xboole_0 X1) \wedge ((v1_ideal_1 X1 X0) \wedge ((v2_ideal_1 X1 X0) \wedge \\ & (v3_ideal_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((v5_ideal_1 X1 X0) \Leftrightarrow (\exists X2.((\neg v1_xboole_0 X2) \wedge \\ & ((v1_finset_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \wedge (X1 = k7_ideal_1 X0 X2)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (9)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow ((v8_ideal_1 X0) \Rightarrow (v6_ideal_1 X0))$$