

l5_lattices (TMd- DBwT9HCpg2t6zQaACvLRhC9BEffpNysG)

October 27, 2020

Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $g2_lattices : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_lattices : \iota \Rightarrow o$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $u2_lattices : \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) X0)))))) \Rightarrow (\forall X2. \forall X3. (g2_lattices X0 X1 = g2_lattices X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (2)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) X0)))))) \Rightarrow ((v2_lattices (g2_lattices X0 X1)) \wedge (l2_lattices (g2_lattices X0 X1))) \quad (4)$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (5)$$

Assume the following.

$$\forall X0. (l2_lattices X0) \Rightarrow ((v2_lattices X0) \Rightarrow (X0 = g2_lattices (u1_struct_0 X0) (u2_lattices X0))) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 (k2_zfmisc_1 (k1_zfmisc_1 \\ & k1_xboole_0) (k1_zfmisc_1 k1_xboole_0)) (k1_zfmisc_1 k1_xboole_0)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 (k1_zfmisc_1 \\ & k1_xboole_0) (k1_zfmisc_1 k1_xboole_0)) (k1_zfmisc_1 k1_xboole_0)))))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (g2_lattices (k1_zfmisc_1 \\ & k1_xboole_0) X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & (g2_lattices (k1_zfmisc_1 k1_xboole_0) X0))) \Rightarrow (X1 = X2))) \end{aligned}$$