

t7_lattice4

(TMKZdzNAtSscZhZsFmSPMxspyZhHrY2nHjy)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v10_lattices : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $v20_lattices : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v21_lattices : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v19_lattices : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge (l3_lattices \\ &X0))) \Rightarrow ((\neg v1_xboole_0 (u1_struct_0 X0)) \wedge ((v19_lattices (u1_struct_0 \\ &X0) X0) \wedge ((v20_lattices (u1_struct_0 X0) X0) \wedge (m1_subset_1 (u1_struct_0 \\ &X0) (k1_zfmisc_1 (u1_struct_0 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge (l3_lattices \\ &X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ &X0))) \Rightarrow ((v19_lattices X1 X0) \Rightarrow (v21_lattices X1 X0))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge (l3_lattices \\ &X0))) \Rightarrow ((v20_lattices (u1_struct_0 X0) X0) \wedge ((v21_lattices (u1_struct_0 \\ &X0) X0) \wedge (m1_subset_1 (u1_struct_0 X0) (k1_zfmisc_1 (u1_struct_0 \\ &X0)))))) \end{aligned}$$