

l64_lattice5
(TMMQc4cUYr9q4exi3pKVTjkqoHstEzkfrGY)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_5 : \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $np_4 : \iota$ be given. Let $k3_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. k3_enumset1 X0 X1 X2 X3 X4 = k2_xboole_0 (k2_tarski X0 X1) (k1_enumset1 X2 X3 X4) \quad (1)$$

Assume the following.

$$k2_finseq_1 np_5 = k3_enumset1 np_1 np_2 np_3 np_4 np_5 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (X3 = k1_enumset1 X0 X1 X2) \Leftrightarrow (\forall X4. (X4 \in X3) \Leftrightarrow (\neg(X4 \neq X0) \wedge ((X4 \neq X1) \wedge (X4 \neq X2)))) \quad (5)$$

Theorem 1

$$\forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\neg(X0 \in k2_finseq_1 np_5) \wedge ((X0 \neq np_1) \wedge (X0 \neq np_2) \wedge (X0 \neq np_3) \wedge ((X0 \neq np_4) \wedge (X0 \neq np_5))))$$