

t1_nat_lat
(TMFHozwF8RBF9xwyxNiMCuhSkvzvZn3PtdL)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_nat_lat : \iota$ be given. Let $k1_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 X0 (u1_struct_0 k3_nat_lat)) \wedge \\ & (m1_subset_1 X1 (u1_struct_0 k3_nat_lat))) \Rightarrow (k1_lattices k3_nat_lat \\ & X0 X1 = k5_nat_d X0 X1) \end{aligned} \quad (1)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (u1_struct_0 k3_nat_lat)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 k3_nat_lat)) \Rightarrow (k1_lattices k3_nat_lat \\ & X0 X1 = k5_nat_d X0 X1)) \end{aligned}$$