

t1_finsub_1 (TMNaFZhG-
Soh68dRzvAVVmGVbk2SjB4FEr7j)

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Let $v4_finsub_1 : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_finsub_1 : \iota \Rightarrow o$ be given. Let $v1_finsub_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v3_finsub_1 X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow (k6_subset_1 X1 X2 \in X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_finsub_1 X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow (k2_xboole_0 X1 X2 \in X0)) \quad (2)$$

Assume the following.

$$\forall X0.((v1_finsub_1 X0) \wedge (v3_finsub_1 X0)) \Rightarrow (v4_finsub_1 X0) \quad (3)$$

Assume the following.

$$\forall X0.(v4_finsub_1 X0) \Rightarrow ((v1_finsub_1 X0) \wedge (v3_finsub_1 X0)) \quad (4)$$

Theorem 1

$$\forall X0.(v4_finsub_1 X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow ((k2_xboole_0 X1 X2 \in X0) \wedge (k6_subset_1 X1 X2 \in X0)))$$