

t18_partit1
(TMXJcDteJc4Lo14zuiqTe4T8cLv5jMFMfs2)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_eqrel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_setfam_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_eqrel_1 X1 X0) \Rightarrow (\forall X2. \forall X3. \forall X4. ((X2 \in X3) \wedge ((X3 \in X1) \wedge ((X2 \in X4) \wedge (X4 \in X1)))) \Rightarrow (X3 = X4)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_setfam_1 X0 X1) \Leftrightarrow (\forall X2. \neg(X2 \in X0) \wedge (\forall X3. \neg(X3 \in X1) \wedge (r1_tarski X2 X3))) \quad (3)$$

Theorem 1

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. \forall X2. \forall X3. \forall X4. (m1_eqrel_1 X4 X0) \Rightarrow (\forall X5. (m1_eqrel_1 X5 X0) \Rightarrow (((r1_setfam_1 X4 X5) \wedge ((X1 \in X5) \wedge ((X2 \in X4) \wedge ((X3 \in X1) \wedge (X3 \in X2)))))) \Rightarrow (r1_tarski X2 X1))))$$