

t2_interval (TM-
Pdo8b9rdCMUhKBXChxR5hBWfcDyJWwAQL)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_interval : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \neg(X0 \neq k1_xboole_0) \wedge (\forall X1. \neg X1 \in X0) \quad (1)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (\forall X3. (X3 \in k1_interval X0 X1 X2) \Leftrightarrow ((r1_tarski X1 X3) \wedge (r1_tarski X3 X2)))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow ((k1_interval X0 X1 X2 \neq k1_xboole_0) \Rightarrow ((X1 \in k1_interval X0 X1 X2) \wedge (X2 \in k1_interval X0 X1 X2))))$$