

t16_interval
(TMNsmF2TWmM6AtAzf3T1iebt6bVQaGPaS46)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_interval : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_interval : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_interval : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_tarski X1 X2)) \Rightarrow (r1_tarski X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge (m1_interval X1 X0)) \Rightarrow (\forall X2. (X2 \in X1) \Leftrightarrow ((r1_tarski (k5_interval X0 X1) X2) \wedge (r1_tarski X2 (k6_interval X0 X1)))))) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \quad (3)$$

Theorem 1

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge (m1_interval X1 X0)) \Rightarrow (r1_tarski (k5_interval X0 X1) (k6_interval X0 X1)))$$