

t125_zfmisc_1 (TMWBjBKCD- jhdpC4roim9wUE8xcvNrxBU2gY)

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Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(\neg r1_xboole_0 X0 X1) \wedge (r1_xboole_0 (k3_xboole_0 X0 X1) X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (\neg(\neg r1_xboole_0 X0 (k2_xboole_0 X1 X2)) \wedge ((r1_xboole_0 X0 X1) \wedge (r1_xboole_0 X0 X2))) \wedge (\neg(\neg(r1_xboole_0 X0 X1) \wedge (r1_xboole_0 X0 X2)) \wedge (r1_xboole_0 X0 (k2_xboole_0 X1 X2))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_xboole_0 X1 X2)) \Rightarrow (r1_xboole_0 X0 X2) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (\neg(\neg r1_xboole_0 X0 X1) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1_xboole_0 X0 X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Rightarrow (r1_xboole_0 X1 X0) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (\neg X0 \in X1) \Rightarrow (r1_xboole_0 (k1_tarski X0) X1) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (7)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. ((r1_tarski (k3_xboole_0 X0 X1) (k1_tarski X3)) \wedge ((X3 \in X2) \wedge (r1_xboole_0 X2 X1))) \Rightarrow (r1_xboole_0 (k2_xboole_0 X0 X2) X1)$$