

t114_zfmisc_1

(TMKPrS3itpqFvt6dQ9oYWGbinKu6KB3L3qi)

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Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (k2_zfmisc_1 X0 X1 = k1_xboole_0) \Leftrightarrow ((X0 = k1_xboole_0) \vee (X1 = k1_xboole_0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Rightarrow (k3_xboole_0 X0 X1 = X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski (k3_xboole_0 X0 X1) X0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k2_zfmisc_1 X0 X1 = k2_zfmisc_1 X2 X3) \Rightarrow ((X0 = k1_xboole_0) \vee ((X1 = k1_xboole_0) \vee ((X0 = X2) \wedge (X1 = X3)))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. k2_zfmisc_1 (k3_xboole_0 X0 X1) (k3_xboole_0 X2 X3) = k3_xboole_0 (k2_zfmisc_1 X0 X2) (k2_zfmisc_1 X1 X3) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (6)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. (r1_tarski (k2_zfmisc_1 X0 X1) (k2_zfmisc_1 X2 X3)) \Rightarrow ((k2_zfmisc_1 X0 X1 = k1_xboole_0) \vee ((r1_tarski X0 X2) \wedge (r1_tarski X1 X3)))$$