

t104_zfmisc_1
(TMEtj1VoaUPmsV8uEn4sU3MHYXZCQh168Ni)

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Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \neg (X0 \in \\ & \quad k3_xboole_0 (k2_zfmisc_1 X1 X2) (k2_zfmisc_1 X3 X4)) \wedge (\forall X5. \\ & \quad \forall X6. \neg (X0 = k4_tarski X5 X6) \wedge ((X5 \in k3_xboole_0 X1 X3) \wedge (X6 \in \\ & \quad \quad k3_xboole_0 X2 X4))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (\neg (\neg r1_xboole_0 X0 X1) \wedge (\forall X2. \neg X2 \in \\ & \quad k3_xboole_0 X0 X1)) \wedge (\neg (\exists X2. X2 \in k3_xboole_0 X0 X1) \wedge (r1_xboole_0 \\ & \quad \quad X0 X1)) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((r1_xboole_0 X0 \\ & \quad X1) \vee (r1_xboole_0 X2 X3)) \Rightarrow (r1_xboole_0 (k2_zfmisc_1 X0 X2) (k2_zfmisc_1 \\ & \quad \quad X1 X3)) \end{aligned}$$