

t33_topgen_4 (TMRNC- FACrzsrd5iAzPEBVguxuEJ7DwuX946)

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Let $k1_xboole_0 : \iota$ be given. Let $k1_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k2_setfam_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. r1_tarski (k1_setfam_1 (k2_setfam_1 X0 X1)) (k2_xboole_0 (k1_setfam_1 X0) (k1_setfam_1 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \neg (X0 \neq k1_xboole_0) \wedge ((X1 \neq k1_xboole_0) \wedge (\neg r1_tarski (k2_xboole_0 (k1_setfam_1 X0) (k1_setfam_1 X1)) (k1_setfam_1 (k2_setfam_1 X0 X1)))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \neg (X0 \neq k1_xboole_0) \wedge ((X1 \neq k1_xboole_0) \wedge (k1_setfam_1 (k2_setfam_1 X0 X1) \neq k2_xboole_0 (k1_setfam_1 X0) (k1_setfam_1 X1)))$$