

t17\_setfam\_1  
(TMG4ZHSmfbDeJoawMmaADoGWTQ8qL5pcgmY)

October 27, 2020

Let  $r1\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_setfam\_1 X0 X1) \Leftrightarrow (\forall X2. \neg(X2 \in X0) \wedge (\forall X3. \neg(X3 \in X1) \wedge (r1\_tarski X2 X3))) \quad (2)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. ((r1\_setfam\_1 X0 X1) \wedge (r1\_setfam\_1 X1 X2)) \Rightarrow (r1\_setfam\_1 X0 X2)$$