

t2\_measure2 (TMFM-  
FXm4gkaw542oGLT5G5KYJvDQsJc2PwD)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v4\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_measure2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v4\_card\_3 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_measure1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k1\_zfmisc\_1 X0)))) \Rightarrow (((\forall X2. (X2 \in X1) \Rightarrow (k6\_subset\_1 X0 X2 \in \\ & X1)) \wedge (\forall X2. ((\neg v1\_xboole\_0 X2) \wedge ((v4\_card\_3 X2) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)))))) \Rightarrow ((r1\_tarski X2 X1) \Rightarrow (k6\_setfam\_1 \\ & X0 X2 \in X1)))) \Leftrightarrow ((\neg v1\_xboole\_0 X1) \wedge ((v1\_prob\_1 X1 X0) \wedge ((v4\_prob\_1 \\ & X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v1\_prob\_1 X1 X0) \wedge \\ & ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0)))))) \Rightarrow (\forall X2. (m1\_measure2 X2 X0 X1) \Rightarrow ((\neg v1\_xboole\_0 X2) \wedge \\ & ((v4\_card\_3 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))) \Rightarrow ((v3\_measure1 X1 X0) \Leftrightarrow (\forall X2. ((\neg v1\_xboole\_0 X2) \wedge \\ & (v4\_card\_3 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)))))) \Rightarrow \\ & ((r1\_tarski X2 X1) \Rightarrow (k5\_setfam\_1 X0 X2 \in X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v1\_prob\_1 X1 X0) \wedge \\ & ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0)))))) \Rightarrow (\forall X2. ((\neg v1\_xboole\_0 X2) \wedge ((v4\_card\_3 X2) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)))))) \Rightarrow ((m1\_measure2 X2 X0 X1) \Leftrightarrow \\ & (r1\_tarski X2 X1))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))) \Rightarrow (((v1\_prob\_1 X1 X0) \wedge (v4\_prob\_1 X1 X0)) \Rightarrow (v3\_measure1 X1 \\ & X0)) \end{aligned} \tag{5}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v1\_prob\_1 X1 X0) \wedge \\ & ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0)))))) \Rightarrow (\forall X2. (m1\_measure2 X2 X0 X1) \Rightarrow ((k6\_setfam\_1 X0 \\ & X2 \in X1) \wedge (k5\_setfam\_1 X0 X2 \in X1))) \end{aligned}$$