

t16_measure2 (TMQTXSnuam- mAu8xeC8z6BpbrGhiefDZvvkK)

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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 $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Let $v10_valued_0 : \iota \Rightarrow o$ be given. Let $v6_supinf_2 : \iota \Rightarrow o$ be given. Let $v4_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_measure2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_measure2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_setfam_1 : \iota \Rightarrow \iota$ be given. Let $v4_card_3 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge \\ & ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\ & (v10_valued_0 X2) \wedge (v6_supinf_2 X2) \wedge ((v4_measure1 X2 X0 X1) \wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers)))))) \Rightarrow \\ & (\forall X3. (m1_measure2 X3 X0 X1) \Rightarrow ((\exists X4. (X4 \in X3) \wedge (m2_measure1 \\ & X4 X0 X1 X2)) \Rightarrow (m2_measure1 (k1_measure2 X0 X1 X3) X0 X1 X2))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 \\ & X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \wedge (m1_measure2 X2 X0 X1)) \Rightarrow (k1_measure2 X0 X1 X2 = k1_setfam_1 \\ & X2) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \exists X1. m1_subset_1 X1 X0 \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X1)\wedge((v1_prob_1 X1 X0)\wedge \\ & ((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0))))))\Rightarrow(\forall X2.(m1_measure2 X2 X0 X1)\Rightarrow((\neg v1_xboole_0 X2)\wedge \\ & ((v4_card_3 X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 X0)))))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X1)\wedge((v1_prob_1 X1 X0)\wedge \\ & ((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 X2 X1 k7_numbers)\wedge \\ & ((v10_valued_0 X2)\wedge((v6_supinf_2 X2)\wedge((v4_measure1 X2 X0 X1)\wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))\Rightarrow \\ & (\forall X3.(m1_measure2 X3 X0 X1)\Rightarrow((\forall X4.(X4 \in X3)\Rightarrow(m2_measure1 \\ & X4 X0 X1 X2))\Rightarrow(m2_measure1 (k1_measure2 X0 X1 X3) X0 X1 X2))) \end{aligned}$$