

t38_measure1

(TMbMtig1Fu7H12LtDu1MCWZZiXD1mj73k9X)

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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 $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v4_measure1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_supinf_2 : \iota$ be given. Let $k3_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_finsub_1 : \iota \Rightarrow o$ be given. Let $m1_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge \\
 & ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\
 & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\
 & ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 X2 X0 X1) \wedge \\
 & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))) \Rightarrow \\
 & ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge ((v10_valued_0 \\
 & X2) \wedge ((v6_supinf_2 X2) \wedge ((v2_measure1 X2 X0 X1) \wedge (m1_subset_1 X2 \\
 & (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge \\
 & ((v1_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\
 & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\
 & ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v2_measure1 X2 X0 X1) \wedge \\
 & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))) \Rightarrow \\
 & (\forall X3. (m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow (\forall X4. \\
 & (m1_measure1 X4 X0 X1 X2) \Rightarrow ((k12_supinf_2 X2 (k1_measure1 X0 X1 X3 \\
 & X4) = k12_supinf_2 X2 X3) \wedge ((k12_supinf_2 X2 (k2_measure1 X0 X1 X3 \\
 & X4) = k1_supinf_2) \wedge (k12_supinf_2 X2 (k3_measure1 X0 X1 X3 X4) = k12_supinf_2 \\
 & X2 X3))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 \\ & X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \wedge ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge ((\\ & v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 X2 X0 X1) \wedge (\\ & m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))))) \Rightarrow \\ & (\forall X3. (m2_measure1 X3 X0 X1 X2) \Rightarrow (m2_subset_1 X3 (k1_zfmisc_1 \\ & X0) X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge \\ & ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\ & ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 X2 X0 X1) \wedge (\\ & m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))))) \Rightarrow \\ & (\forall X3. (m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow ((m2_measure1 \\ & X3 X0 X1 X2) \Leftrightarrow (k12_supinf_2 X2 X3 = k1_supinf_2))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\ & ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v2_measure1 X2 X0 X1) \wedge (\\ & m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))))) \Rightarrow \\ & (\forall X3. (m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow ((m1_measure1 \\ & X3 X0 X1 X2) \Leftrightarrow (k12_supinf_2 X2 X3 = k1_supinf_2))) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0))) \Rightarrow (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 X1 X0))) \Rightarrow \\ & ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 \\ & X1 X0)))) \end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge \\ & ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\ & ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 X2 X0 X1) \wedge (\\ & m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))))) \Rightarrow \\ & (\forall X3. (m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow (\forall X4. \\ & (m2_measure1 X4 X0 X1 X2) \Rightarrow ((k12_supinf_2 X2 (k1_measure1 X0 X1 X3 \\ & X4) = k12_supinf_2 X2 X3) \wedge ((k12_supinf_2 X2 (k2_measure1 X0 X1 X3 \\ & X4) = k1_supinf_2) \wedge (k12_supinf_2 X2 (k3_measure1 X0 X1 X3 X4) = k12_supinf_2 \\ & X2 X3)))))) \end{aligned}$$