

t33_measure1

(TMHuR7F4VaTkRAttLzsVZChk3i6wTMX6aZ5)

October 27, 2020

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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k3_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_finsub_1 : \iota \Rightarrow o$ be given. 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.

$$\begin{aligned}
 & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge \\
 & ((v1_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\
 & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\
 & ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v2_measure1 X2 X0 X1) \wedge \\
 & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers))))))) \Rightarrow \\
 & (\forall X3. (m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow (\forall X4. \\
 & (m2_subset_1 X4 (k1_zfmisc_1 X0) X1) \Rightarrow (r1_xreal_0 (k12_supinf_2 \\
 & X2 (k1_measure1 X0 X1 X3 X4) (k3_supinf_2 (k12_supinf_2 X2 X3) (\\
 & k12_supinf_2 X2 X4))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0))) \Rightarrow (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 X1 X0))) \Rightarrow \\ & ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 \\ & X1 X0)))))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge \\ & ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X1 k7_numbers) \wedge \\ & ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 X2 X0 X1) \wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers)))))) \Rightarrow \\ & (\forall X3.(m2_subset_1 X3 (k1_zfmisc_1 X0) X1) \Rightarrow (\forall X4. \\ & (m2_subset_1 X4 (k1_zfmisc_1 X0) X1) \Rightarrow (r1_xreal_0 (k12_supinf_2 \\ & X2 (k1_measure1 X0 X1 X3 X4)) (k3_supinf_2 (k12_supinf_2 X2 X3) (\\ & k12_supinf_2 X2 X4)))))) \end{aligned}$$