

l92_lpspace2

(TMKZb3txSHZsh6RDXcXLW9mPfc61Y5pCRJT)

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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 $k1_numbers : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_lpspace2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r3_mesfunc6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_mesfun6c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k56_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\
 & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 \\
 & X2 X1 k7_numbers) \wedge ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 \\
 & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers)))))) \Rightarrow \\
 & (\forall X3. ((v2_xxreal_0 X3) \wedge (m1_subset_1 X3 k1_numbers)) \Rightarrow \\
 & (\forall X4. ((v1_funct_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & X0 k1_numbers)))) \Rightarrow (\forall X5. ((v1_funct_1 X5) \wedge (m1_subset_1 \\
 & X5 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow (((X4 \in k1_lpspace2 \\
 & X0 X1 X2 X3) \wedge (X5 \in k1_lpspace2 X0 X1 X2 X3)) \Rightarrow ((r3_mesfunc6 X0 X1 X2 \\
 & (k2_mesfun6c X3 X0 (k56_valued_1 X0 k1_numbers X4)) \wedge ((r3_mesfunc6 \\
 & X0 X1 X2 (k2_mesfun6c X3 X0 (k56_valued_1 X0 k1_numbers X5)) \wedge (r3_mesfunc6 \\
 & X0 X1 X2 (k3_valued_1 X0 k1_numbers k1_numbers (k2_mesfun6c X3 X0 \\
 & (k56_valued_1 X0 k1_numbers X4)) (k2_mesfun6c X3 X0 (k56_valued_1 \\
 & X0 k1_numbers X5))))))))))
 \end{aligned}$$

(1)

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 X1 k7_numbers) \wedge ((v10_valued_0 X2) \wedge ((v6_supinf_2 X2) \wedge ((v4_measure1 \\ & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 k7_numbers)))))) \Rightarrow \\ & (\forall X3.((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k1_numbers)))) \Rightarrow (\forall X4.((v2_xxreal_0 X4) \wedge (m1_subset_1 \\ & X4 k1_numbers)) \Rightarrow ((X3 \in k1_lp_space2 X0 X1 X2 X4) \Rightarrow (r3_mesfunc6 X0 \\ & X1 X2 (k2_mesfun6c X4 X0 (k56_valued_1 X0 k1_numbers X3)))))) \end{aligned}$$