

t6_topdim_2

(TMY7wM1PHgoL6yPPtbRz5oPaRXn8wJERtw1)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $v3_pcomps_1 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v5_waybel23 : \iota \Rightarrow o$ be given. Let $v3_topdim_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_topdim_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_topdim_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v2_tops_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_setfam_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_card_3 : \iota \Rightarrow o$ be given. Let $v2_topdim_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_topdim_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v2_pre_topc X1) \wedge \\
 & (v3_pcomps_1 X1) \wedge (l1_pre_topc X1)) \Rightarrow ((v5_waybel23 X1) \Rightarrow (((\exists X2. \\
 & (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X1)))) \wedge \\
 & ((v2_tops_2 X2 X1) \wedge (m1_setfam_1 X2 (u1_struct_0 X1)) \wedge ((v4_card_3 \\
 & X2) \wedge ((v2_topdim_1 X2 X1) \wedge (r1_xxreal_0 (k3_topdim_1 X1 X2) X0)))))) \Rightarrow \\
 & ((v3_topdim_1 X1) \wedge (r1_xxreal_0 (k4_topdim_1 X1) X0)) \wedge (\neg (v3_topdim_1 \\
 & X1) \wedge ((r1_xxreal_0 (k4_topdim_1 X1) X0) \wedge (\forall X2.(m1_subset_1 \\
 & X2 (k1_zfmisc_1 (u1_struct_0 X1)) \Rightarrow (\forall X3.(m1_subset_1 \\
 & X3 (k1_zfmisc_1 (u1_struct_0 X1)) \Rightarrow (\neg (k2_struct_0 X1 = k4_subset_1 \\
 & (u1_struct_0 X1) X2 X3) \wedge ((r1_xboole_0 X2 X3) \wedge ((r1_xxreal_0 (k2_topdim_1 \\
 & X1 X2) (k3_xxreal_3 X0 np_1)) \wedge (r1_xxreal_0 (k2_topdim_1 X1 X3) \\
 & k6_numbers)))))))))))))
 \end{aligned}
 \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.((v2_pre_topc\ X1) \wedge \\ & (v3_pcomps_1\ X1) \wedge (l1_pre_topc\ X1))) \Rightarrow (\neg(v5_waybel23\ X1) \wedge ((v3_topdim_1 \\ & X1) \wedge ((r1_xxreal_0\ (k4_topdim_1\ X1)\ X0) \wedge (\forall X2.(m1_subset_1 \\ & X2\ (k1_zfmisc_1\ (u1_struct_0\ X1))) \Rightarrow (\forall X3.(m1_subset_1 \\ & X3\ (k1_zfmisc_1\ (u1_struct_0\ X1))) \Rightarrow (\neg(k2_struct_0\ X1 = k4_subset_1 \\ & (u1_struct_0\ X1)\ X2\ X3) \wedge ((r1_xboole_0\ X2\ X3) \wedge ((r1_xxreal_0\ (k2_topdim_1 \\ & X1\ X2)\ (k3_xxreal_3\ X0\ np_1)) \wedge (r1_xxreal_0\ (k2_topdim_1\ X1\ X3) \\ & k6_numbers)))))))))) \end{aligned}$$