t4_topdim_2 (TMMtL3tP5pCifwCchR7USzE5DpWtsaqJn4D)

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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 $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ 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 $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_topdim\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_topdim\_1 : \iota \Rightarrow o$ be given. Let $k4\_topdim\_1 : \iota \Rightarrow \iota$ 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. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((v2\_pre\_topc\ X1) \wedge ((v3\_pcomps\_1\ X1) \wedge (l1\_pre\_topc\ X1))) \Rightarrow ((v5\_waybel23\ X1) \Rightarrow (((\exists X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))))) \wedge ((v2\_tops\_2\ X2\ X1) \wedge ((m1\_setfam\_1\ X2\ (u1\_struct\_0\ X1)) \wedge ((v4\_card\_3\ X2) \wedge ((v2\_topdim\_1\ X2\ X1) \wedge (r1\_xxreal\_0\ (k3\_topdim\_1\ X1\ X2)\ X0)))))) \Rightarrow ((v3\_topdim\_1\ X1) \wedge (r1\_xxreal\_0\ (k4\_topdim\_1\ X1)\ X0))) \wedge (\neg (v3\_topdim\_1\ X1) \wedge ((r1\_xxreal\_0\ (k4\_topdim\_1\ X1)\ X0) \wedge (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow (\neg (k2\_struct\_0\ X1 = k4\_subset\_1\ (u1\_struct\_0\ X1)\ X2\ X3) \wedge ((r1\_xboole\_0\ X2\ X3) \wedge ((r1\_xxreal\_0\ (k2\_topdim\_1\ X1\ X2)\ (k3\_xxreal\_3\ X0\ np\_\_1)) \wedge (r1\_xxreal\_0\ (k2\_topdim\_1\ X1\ X3)\ k6\_numbers))))))))))) \tag{1}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.((v2\_pre\_topc\ X1) \wedge ((v3\_pcomps\_1\ X1) \wedge (l1\_pre\_topc\ X1))) \Rightarrow ((v5\_waybel23\ X1) \Rightarrow ((\forall X2.((v1\_finset\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1)))))) \Rightarrow (\neg (v2\_tops\_2\ X2\ X1) \wedge ((m1\_setfam\_1\ X2\ (u1\_struct\_0\ X1)) \wedge ((v4\_card\_3\ X2) \wedge ((v2\_topdim\_1\ X2\ X1) \wedge (r1\_xxreal\_0\ (k3\_topdim\_1\ X1\ X2)\ X0)))))) \vee ((v3\_topdim\_1\ X1) \wedge (r1\_xxreal\_0\ (k4\_topdim\_1\ X1)\ X0)))))$$