

t24\_topdim\_1  
 (TMHfWZYZ9W7Zyiiw5Ec7djTizQPndQzz7hT)

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Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $r1\_borsuk\_3 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_topdim\_1 : \iota \Rightarrow o$  be given. Let  $k4\_topdim\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc X1)) \Rightarrow ((r1\_borsuk\_3 X0 X1) \Rightarrow (( \\ & (v3\_topdim\_1 X0) \Rightarrow (v3\_topdim\_1 X1)) \wedge ((v3\_topdim\_1 X1) \Rightarrow (v3\_topdim\_1 \\ & X0)) \wedge ((v3\_topdim\_1 X0) \Rightarrow (k4\_topdim\_1 X1 = k4\_topdim\_1 X0)))))) \end{aligned} \tag{1}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc X1)) \Rightarrow ((r1\_borsuk\_3 X0 X1) \Rightarrow (( \\ & v3\_topdim\_1 X0) \Leftrightarrow (v3\_topdim\_1 X1)))) \end{aligned}$$