

# l17\_goboard6 (TM- NTVLcR5m8Yvh2VAJfFSgQ6MfQwRriKTLJ)

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Let  $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $k14\_euclid : \iota \Rightarrow \iota$  be given. Let  $k2\_pcomps\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k3\_pcomps\_1 : \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_metric\_1 : \iota \Rightarrow o$  be given. Let  $v6\_metric\_1 : \iota \Rightarrow o$  be given. Let  $v7\_metric\_1 : \iota \Rightarrow o$  be given. Let  $v8\_metric\_1 : \iota \Rightarrow o$  be given. Let  $v9\_metric\_1 : \iota \Rightarrow o$  be given. Let  $l1\_metric\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0\ np\_2) \wedge (m2\_subset\_1\ np\_2\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_2\ k1\_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (2)$$

Assume the following.

$$k3\_pcomps\_1\ (k14\_euclid\ np\_2) = g1\_pre\_topc\ (u1\_struct\_0\ (k15\_euclid\ np\_2))\ (u1\_pre\_topc\ (k15\_euclid\ np\_2)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7\_ordinal1\ X0) \Rightarrow ((v1\_metric\_1\ (k14\_euclid\ X0)) \wedge \\ & ((v6\_metric\_1\ (k14\_euclid\ X0)) \wedge ((v7\_metric\_1\ (k14\_euclid\ X0)) \wedge \\ & ((v8\_metric\_1\ (k14\_euclid\ X0)) \wedge ((v9\_metric\_1\ (k14\_euclid\ X0)) \wedge \\ & (l1\_metric\_1\ (k14\_euclid\ X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l1\_metric\_1\ X0) \Rightarrow (k3\_pcomps\_1\ X0 = g1\_pre\_topc\ (u1\_struct\_0\ X0)\ (k2\_pcomps\_1\ X0)) \quad (5)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1) \Rightarrow (v7\_ordinal1\ X0) \quad (6)$$

**Theorem 1**

$$g1\_pre\_topc (u1\_struct\_0 (k15\_euclid\ np\_2)) (u1\_pre\_topc (k15\_euclid\ np\_2)) = g1\_pre\_topc (u1\_struct\_0 (k14\_euclid\ np\_2)) (k2\_pcomps\_1 (k14\_euclid\ np\_2))$$