

t18\_compts\_1 (TMQzzfAww-  
suKi88LvnymYSZDrL3UZvptHzH)

October 27, 2020

Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_compts\_1 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v8\_struct\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (l1\_struct\_0 X0) \tag{1}$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0) \Rightarrow ((v8\_struct\_0 X0) \Leftrightarrow (v1\_finset\_1 (u1\_struct\_0 X0))) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (((v8\_struct\_0 X0) \wedge (v2\_pre\_topc X0)) \Rightarrow ((v2\_pre\_topc X0) \wedge (v1\_compts\_1 X0))) \tag{3}$$

**Theorem 1**

$$\forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow ((v1\_finset\_1 (u1\_struct\_0 X0)) \Rightarrow (v1\_compts\_1 X0))$$