

## t27\_compos\_1

(TMP5PQd9aJXzpgqryQrFRF2KqoMDqcidKm3)

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Let  $l1\_compos\_1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_afinsq\_1 : \iota \Rightarrow o$  be given. Let  $v3\_compos\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v4\_compos\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_compos\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_compos\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1\_compos\_1 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ & ((v1\_relat\_1 X1) \wedge ((v4\_relat\_1 X1 k5\_numbers) \wedge ((v5\_relat\_1 X1 \\ & (u1\_compos\_1 X0)) \wedge ((v1\_funct\_1 X1) \wedge ((v1\_finset\_1 X1) \wedge ((v1\_afinsq\_1 \\ & X1) \wedge ((v3\_compos\_1 X1 X0) \wedge (v4\_compos\_1 X1 X0)))))))))) \Rightarrow (k8\_compos\_1 \\ & X0 X1 (k4\_compos\_1 X0) = X1) \end{aligned} \tag{1}$$

### Theorem 1

$$\begin{aligned} & \forall X0. (l1\_compos\_1 X0) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge \\ & ((v1\_relat\_1 X1) \wedge ((v4\_relat\_1 X1 k5\_numbers) \wedge ((v5\_relat\_1 X1 \\ & (u1\_compos\_1 X0)) \wedge ((v1\_funct\_1 X1) \wedge ((v1\_finset\_1 X1) \wedge ((v1\_afinsq\_1 \\ & X1) \wedge ((v3\_compos\_1 X1 X0) \wedge (v4\_compos\_1 X1 X0)))))))))) \Rightarrow (k8\_compos\_1 \\ & X0 X1 (k4\_compos\_1 X0) = X1) \end{aligned}$$