

t25\_pcs\_0  
(TMR4VExno9aVnPwVhjQUF47JZHBU4bn8AzH)

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Let  $l2\_pcs\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k19\_pcs\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v12\_pcs\_0 : \iota \Rightarrow o$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_pcs\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (l2\_pcs\_0 X0) \Rightarrow ((v12\_pcs\_0 (k19\_pcs\_0 X0 X1)) \wedge (l2\_pcs\_0 (k19\_pcs\_0 X0 X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2\_xboole\_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. (l2\_pcs\_0 X0) \Rightarrow (\forall X1. \forall X2. ((v12\_pcs\_0 X2) \wedge (l2\_pcs\_0 X2)) \Rightarrow ((X2 = k19\_pcs\_0 X0 X1) \Leftrightarrow ((u1\_struct\_0 X2 = k2\_xboole\_0 \\ (k1\_tarski X1) (u1\_struct\_0 X0)) \wedge ((u1\_orders\_2 X2 = k2\_xboole\_0 \\ (k2\_zfmisc\_1 (k1\_tarski X1) (u1\_struct\_0 X2)) (u1\_orders\_2 X0)) \wedge \\ (u1\_pcs\_0 X2 = k2\_xboole\_0 (k2\_xboole\_0 (k2\_zfmisc\_1 (k1\_tarski X1) (u1\_struct\_0 X2)) \\ (k2\_zfmisc\_1 (u1\_struct\_0 X2) (k1\_tarski X1))) (u1\_pcs\_0 X0)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (6)$$

**Theorem 1**

$$\forall X0.(l2\_pcs\_0 X0) \Rightarrow (\forall X1.\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 (k19\_pcs\_0 X0 X1))) \Rightarrow ((X2 \neq X1) \Rightarrow (X2 \in u1\_struct\_0 X0)))$$