

t25\_dickson (TMYC-  
Qdgd2RK2c6K4smCs5SWAbGHmyzGYjLF)

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Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $r1\_dickson : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_subset\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

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

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1\_tarski X0 X0 \quad (3)$$

Assume the following.

$$\forall X0. v1\_xboole\_0 (k1\_subset\_1 X0) \quad (4)$$

Assume the following.

$$\forall X0. m1\_subset\_1 (k1\_subset\_1 X0) (k1\_zfmisc\_1 X0) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1\_orders\_2 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow (\forall X2. (r1\_dickson X0 X1 X2) \Leftrightarrow ((r1\_tarski \\ X2 X1) \wedge (\forall X3. (m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow (\neg(X3 \in X1) \wedge \\ (\forall X4. (m1\_subset\_1 X4 (u1\_struct\_0 X0)) \Rightarrow (\neg(X4 \in X2) \wedge (r1\_orders\_2 \\ X0 X4 X3)))))))))) \end{aligned} \quad (6)$$

**Theorem 1**

$$\forall X0. (l1\_orders\_2 X0) \Rightarrow (r1\_dickson X0 (k1\_subset\_1 (u1\_struct\_0 X0)) k1\_xboole\_0)$$