

t28\_neckla\_3 (TMYXB-  
Drq6g2bPRQSGqNfT5X3Aq8Xca7eVB7)

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Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_neckla\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_msualg\_5 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Let  $v3\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v8\_relat\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v3\_relat\_2 X3) \wedge \\ & ((v1\_partfun1 X3 X0) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X0)))) \Rightarrow ((k4\_tarski X1 X2 \in X3) \Rightarrow (k4\_tarski X2 X1 \in X3)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v3\_relat\_2 X3) \wedge \\ & ((v1\_partfun1 X3 X0) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X0)))) \Rightarrow ((X1 \in k6\_eqrel\_1 X0 X0 X3 X2) \Leftrightarrow (k4\_tarski X1 X2 \in X3)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (l1\_orders\_2 X0) \Rightarrow (m1\_subset\_1 (u1\_orders\_2 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)))) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X0))) \Rightarrow ((v1\_partfun1 (k1\_msualg\_5 X0 X1) X0) \wedge ((v3\_relat\_2 ( \\ & k1\_msualg\_5 X0 X1)) \wedge ((v8\_relat\_2 (k1\_msualg\_5 X0 X1)) \wedge (m1\_subset\_1 \\ & (k1\_msualg\_5 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1\_orders\_2 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 \\ & X0)) \Rightarrow (k1\_neckla\_3 X0 X1 = k6\_eqrel\_1 (u1\_struct\_0 X0) (u1\_struct\_0 \\ & X0) (k1\_msualg\_5 (u1\_struct\_0 X0) (u1\_orders\_2 X0)) X1)) \end{aligned} \quad (5)$$

**Theorem 1**

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(X2 \in k1\_neckla\_3 X0 X1) \Rightarrow (k4\_tarski X1 X2 \in k1\_msualg\_5 (u1\_struct\_0 X0) (u1\_orders\_2 X0))))$$