

t10\_oposet\_1  
(TMd6V8R5L8wDcRdZumgRJT6dVkm1NEDbkCZ)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v2\_necklace : \iota \Rightarrow o$  be given. Let  $v3\_necklace : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r5\_relat\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow (m1\_subset\_1 (u1\_orders\_2 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow ((v2\_necklace X0) \Leftrightarrow (r5\_relat\_2 (u1\_orders\_2 X0) (u1\_struct\_0 X0))) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 X0) \Rightarrow (\forall X1.(r5\_relat\_2 X0 X1) \Leftrightarrow (\forall X2. \forall X3. \neg (X2 \in X1) \wedge ((X3 \in X1) \wedge ((k4\_tarski X2 X3 \in X0) \wedge (k4\_tarski X3 X2 \in X0)))))) \quad (3)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v3\_necklace X0) \Leftrightarrow (\forall X1. \neg (X1 \in u1\_struct\_0 X0) \wedge (k4\_tarski X1 X1 \in u1\_orders\_2 X0))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow (v1\_relat\_1 X2) \quad (5)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \Rightarrow ((v2\_necklace X0) \Rightarrow (v3\_necklace X0))$$