

# l38\_waybel25 (TMFKhoCJ- NaUXAY3UvqnMh3pcqtAMfM5G4XR)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v7\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_struct\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow ((v1\_subset\_1 X1 X0) \Leftrightarrow (X1 \neq X0)) \quad (1)$$

Assume the following.

$$\forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow ((v7\_struct\_0 X0) \Leftrightarrow (\exists X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (u1\_struct\_0 X0 = k6\_domain\_1 (u1\_struct\_0 X0) X1))) \quad (2)$$

Assume the following.

$$\forall X0. ((v13\_struct\_0 X0 np\_1) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow ((\neg v1\_xboole\_0 X1) \Rightarrow ((\neg v1\_xboole\_0 X1) \wedge (\neg v1\_subset\_1 X1 (u1\_struct\_0 X0))))) \quad (3)$$

Assume the following.

$$\forall X0. (l1\_struct\_0 X0) \Rightarrow (((\neg v2\_struct\_0 X0) \wedge (v7\_struct\_0 X0)) \Rightarrow (v13\_struct\_0 X0 np\_1)) \quad (4)$$

## Theorem 1

$$\forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow ((u1\_struct\_0 X0 = k6\_domain\_1 (u1\_struct\_0 X0) X2) \Rightarrow (X1 = k6\_domain\_1 (u1\_struct\_0 X0) X2))))$$