

## t6\_waybel28

(TMb81oDRhULVmsRKdpQVHmEB7jG7fqWzZga)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_waybel28 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Let  $v6\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ X0 X0))) \Rightarrow (\forall X2. \forall X3. (g1\_orders\_2 X0 X1 = g1\_orders\_2 \\ X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (l1\_orders\_2 X0) \Rightarrow (m1\_subset\_1 (u1\_orders\_2 X0) (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0)))) \quad (2)$$

Assume the following.

$$\forall X0. (l1\_struct\_0 X0) \Rightarrow (\forall X1. (l1\_waybel\_0 X1 X0) \Rightarrow \\ (l1\_orders\_2 X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 \\ X0)) \wedge (((\neg v2\_struct\_0 X1) \wedge (l1\_waybel\_0 X1 X0)) \wedge ((v1\_funct\_1 \\ X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 X1) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\ X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X1) (u1\_struct\_0 X1))))))) \Rightarrow \\ ((\neg v2\_struct\_0 (k1\_waybel28 X0 X1 X2)) \wedge ((v6\_waybel\_0 (k1\_waybel28 \\ X0 X1 X2) X0) \wedge (l1\_waybel\_0 (k1\_waybel28 X0 X1 X2) X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. \\
& ((\neg v2\_struct\_0 X1) \wedge (l1\_waybel\_0 X1 X0)) \Rightarrow (\forall X2.((v1\_funct\_1 \\
& X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 X1) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\
& X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X1) (u1\_struct\_0 X1)))))) \Rightarrow \\
& (\forall X3.((\neg v2\_struct\_0 X3) \wedge ((v6\_waybel\_0 X3 X0) \wedge (l1\_waybel\_0 \\
& X3 X0))) \Rightarrow ((X3 = k1\_waybel28 X0 X1 X2) \Leftrightarrow ((g1\_orders\_2 (u1\_struct\_0 \\
& X3) (u1\_orders\_2 X3) = g1\_orders\_2 (u1\_struct\_0 X1) (u1\_orders\_2 \\
& X1)) \wedge (r1\_funct\_2 (u1\_struct\_0 X3) (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X1) (u1\_struct\_0 X0) (u1\_waybel\_0 X0 X3) (k1\_partfun1 (u1\_struct\_0 \\
& X1) (u1\_struct\_0 X1) (u1\_struct\_0 X1) (u1\_struct\_0 X0) X2 (u1\_waybel\_0 \\
& X0 X1))))))))) \\
& \tag{5}
\end{aligned}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. \\
& ((\neg v2\_struct\_0 X1) \wedge (l1\_waybel\_0 X1 X0)) \Rightarrow (\forall X2.((v1\_funct\_1 \\
& X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 X1) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\
& X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X1) (u1\_struct\_0 X1)))))) \Rightarrow \\
& (u1\_struct\_0 (k1\_waybel28 X0 X1 X2) = u1\_struct\_0 X1))
\end{aligned}$$