

# t10\_waybel28 (TMXUvHQsqhsxYfSAjQrhYFd- fLC12JNGFEYE)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v4\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v7\_waybel\_0 : \iota \Rightarrow o$  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  $k6\_yellow\_6 : \iota \Rightarrow \iota$  be given. Let  $k1\_waybel28 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v6\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_yellow\_6 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2\_struct\_0 X1) \wedge (l1\_waybel\_0 X1 X0)) \Rightarrow (\forall X2. ((v1\_funct\_1 \\ & X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 X1) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X1) (u1\_struct\_0 X1)))))) \Rightarrow \\ & (u1\_struct\_0 (k1\_waybel28 X0 X1 X2) = u1\_struct\_0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 \\ & X0)) \wedge (((\neg v2\_struct\_0 X1) \wedge (v4\_orders\_2 X1) \wedge ((v7\_waybel\_0 X1) \wedge \\ & (l1\_waybel\_0 X1 X0)))) \wedge ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 \\ & X1) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (u1\_struct\_0 X1) (u1\_struct\_0 X1)))))) \Rightarrow ((\neg v2\_struct\_0 (k1\_waybel28 \\ & X0 X1 X2)) \wedge ((v4\_orders\_2 (k1\_waybel28 X0 X1 X2)) \wedge ((v6\_waybel\_0 \\ & (k1\_waybel28 X0 X1 X2) X0) \wedge (v7\_waybel\_0 (k1\_waybel28 X0 X1 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 \\ & X0)) \wedge (((\neg v2\_struct\_0 X1) \wedge (l1\_waybel\_0 X1 X0)) \wedge ((v1\_funct\_1 \\ & X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 X1) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X1) (u1\_struct\_0 X1)))))) \Rightarrow \\ & ((\neg v2\_struct\_0 (k1\_waybel28 X0 X1 X2)) \wedge ((v6\_waybel\_0 (k1\_waybel28 \\ & X0 X1 X2) X0) \wedge (l1\_waybel\_0 (k1\_waybel28 X0 X1 X2) X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. \\
& (X1 = k6\_yellow\_6 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.((\neg v2\_struct\_0 \\
& X3) \wedge ((v4\_orders\_2 X3) \wedge ((v6\_waybel\_0 X3 X0) \wedge ((v7\_waybel\_0 X3) \wedge \\
& (l1\_waybel\_0 X3 X0)))))) \wedge ((X3 = X2) \wedge (u1\_struct\_0 X3 \in k1\_yellow\_6 \\
& (u1\_struct\_0 X0))))))
\end{aligned} \tag{4}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\forall X1. \\
& ((\neg v2\_struct\_0 X1) \wedge ((v4\_orders\_2 X1) \wedge ((v7\_waybel\_0 X1) \wedge (l1\_waybel\_0 \\
& X1 X0)))) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 \\
& X1) (u1\_struct\_0 X1)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
& (u1\_struct\_0 X1) (u1\_struct\_0 X1)))))) \Rightarrow ((X1 \in k6\_yellow\_6 X0) \Rightarrow \\
& (k1\_waybel28 X0 X1 X2 \in k6\_yellow\_6 X0)))
\end{aligned}$$