

# t10\_armstrng (TMNHWaSf- GLEzs5dMopCoP7dN31bfNCsDLzq)

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Let  $l1\_armstrng : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_armstrng : \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_armstrng : \iota \Rightarrow \iota$  be given. Let  $r2\_armstrng : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & (k4\_tarski (k4\_tarski X0 X2) X4 = k4\_tarski (k4\_tarski X1 X3) X5) \Rightarrow \\ & ((X0 = X1) \wedge (X2 = X3)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1\_armstrng X0) \Rightarrow (k5\_armstrng X0 = ReplSep2 (toset \\ & (\lambda X1 : \iota. m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_armstrng X0)))) \\ & (\lambda X1 : \iota. toset (\lambda X2 : \iota. m1\_subset\_1 X2 (k1\_zfmisc\_1 ( \\ & u1\_armstrng X0)))) (\lambda X1 : \iota. \lambda X2 : \iota. r2\_armstrng X0 X1 \\ & X2) (\lambda X1 : \iota. \lambda X2 : \iota. k4\_tarski X1 X2)) \end{aligned} \tag{2}$$

## Theorem 1

$$\begin{aligned} & \forall X0. (l1\_armstrng X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (u1\_armstrng X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (u1\_armstrng X0))) \Rightarrow ((k4\_tarski X1 X2 \in k5\_armstrng X0) \Leftrightarrow (r2\_armstrng \\ & X0 X1 X2)))) \end{aligned}$$