

# l115\_intpro\_1

(TMXY5Hn3r6XZS8vMa21BvvTXxcNdmx887P8)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_intpro\_1 : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k11\_intpro\_1 : \iota \Rightarrow \iota$  be given. Let  $v9\_intpro\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_intpro\_1)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 k1\_intpro\_1)) \Rightarrow (((v9\_intpro\_1 X0) \wedge \\ & (r1\_tarski X1 X0)) \Rightarrow (r1\_tarski (k11\_intpro\_1 X1) X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_intpro\_1)) \Rightarrow (m1\_subset\_1 (k11\_intpro\_1 X0) (k1\_zfmisc\_1 k1\_intpro\_1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_intpro\_1)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 k1\_intpro\_1)) \Rightarrow ((X1 = k11\_intpro\_1 \\ & X0) \Leftrightarrow (\forall X2.(m1\_subset\_1 X2 k1\_intpro\_1) \Rightarrow ((X2 \in X1) \Leftrightarrow (\forall X3. \\ & (m1\_subset\_1 X3 (k1\_zfmisc\_1 k1\_intpro\_1)) \Rightarrow (((v9\_intpro\_1 X3) \wedge \\ & (r1\_tarski X0 X3)) \Rightarrow (X2 \in X3))))))) \end{aligned} \quad (5)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_intpro\_1)) \Rightarrow (r1\_tarski (k11\_intpro\_1 (k11\_intpro\_1 X0)) (k11\_intpro\_1 X0))$$