

t31\_qc\_lang3  
(TMNzeUFXMiVKtR9f2VcBscCySeocPTh3aYT)

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Let  $m1\_qc\_lang1 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k5\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k3\_qc\_lang3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $np\_6 : \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\neg v1\_xboole\_0 (k5\_qc\_lang1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (m1\_subset\_1 (k5\_qc\_lang1 X0) (k1\_zfmisc\_1 (k2\_qc\_lang1 X0))) \quad (5)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (k5\_qc\_lang1 X0 = k2\_zfmisc\_1 (k1\_tarski np\_6) k5\_numbers) \quad (6)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 k5\_numbers) \Rightarrow (k3\_qc\_lang3 X0 X1 = k4\_tarski np\_6 X1)) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X2 = k2\_zfmisc\_1 X0 X1) \Leftrightarrow (\forall X3. \\ & (X3 \in X2) \Leftrightarrow (\exists X4. \exists X5. (X4 \in X0) \wedge ((X5 \in X1) \wedge (X3 = k4\_tarSKI \\ & X4 X5)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarSKI X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (9)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_xboole\_0 X1)) \quad (10)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m2\_subset\_1 X1 (k2\_qc\_lang1 \\ & X0) (k5\_qc\_lang1 X0)) \Rightarrow (\exists X2. (m1\_subset\_1 X2 k5\_numbers) \wedge \\ & (k3\_qc\_lang3 X0 X2 = X1))) \end{aligned}$$