

## t40\_eqrel\_1

(TMWb1DpZBQrtDe2EbLr1Y4oRMMna8mPw8ro)

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Let  $m1\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. k9\_setfam\_1 X0 = k1\_zfmisc\_1 X0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (k6\_domain\_1 X0 X1 = k1\_tarski X1) \quad (2)$$

Assume the following.

$$\forall X0. \neg v1\_xboole\_0 (k1\_zfmisc\_1 X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_eqrel\_1 X1 X0) \Rightarrow (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge (m1\_subset\_1 X1 X0)) \Rightarrow (m1\_subset\_1 (k6\_domain\_1 X0 X1) (k1\_zfmisc\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (k9\_setfam\_1 X0)))) \Rightarrow ((v1\_eqrel\_1 X1 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Rightarrow (m1\_eqrel\_1 X2 X0))) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (7)$$

**Theorem 1**

$$\forall X0.\forall X1.(m1\_eqrel\_1 X1 X0)\Rightarrow((v1\_eqrel\_1 (k6\_domain\_1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)) X1) X0)\wedge(m1\_subset\_1 (k6\_domain\_1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0)) X1) (k1\_zfmisc\_1 (k1\_zfmisc\_1 (k9\_setfam\_1 X0))))))$$