

## t12\_partit1

(TMURN8htsdHVDKxhPHTtJwdYTwtzpeBpMXw)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v3\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v8\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_eqrel\_1 X1 X0) \Rightarrow (\exists X2. ((v3\_relat\_2 X2) \wedge ((v8\_relat\_2 X2) \wedge ((v1\_partfun1 X2 X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \wedge (X1 = k7\_eqrel\_1 X0 X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0 X0) \wedge ((m1\_subset\_1 X1 X0) \wedge (m1\_eqrel\_1 X2 X0))) \Rightarrow (m1\_subset\_1 (k11\_eqrel\_1 X0 X1 X2) (k1\_zfmisc\_1 X0)) \quad (2)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 X0) \Rightarrow (\forall X2. (m1\_eqrel\_1 X2 X0) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (k1\_zfmisc\_1 X0)) \Rightarrow ((X3 = k11\_eqrel\_1 X0 X1 X2) \Leftrightarrow ((X1 \in X3) \wedge (X3 \in X2)))))) \quad (3)$$

### Theorem 1

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_eqrel\_1 X1 X0) \Rightarrow (\forall X2. (m1\_subset\_1 X2 X0) \Rightarrow (\exists X3. (m1\_subset\_1 X3 (k1\_zfmisc\_1 X0)) \wedge ((X2 \in X3) \wedge (X3 \in X1))))))$$