

# t51\_mcart\_1 (TMJbWxzmc- QQZr5CPkoTo7pZbLJwREroGfLT)

October 27, 2020

Let  $k1\_xboole\_0 : \iota$  be given. Let  $k4\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (k2\_zfmisc\_1 X0 X1 = k1\_xboole\_0) \Leftrightarrow ((X0 = k1\_xboole\_0) \vee (X1 = k1\_xboole\_0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. k4\_zfmisc\_1 X0 X1 X2 X3 = k2\_zfmisc\_1 (k3\_zfmisc\_1 X0 X1 X2) X3 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3\_zfmisc\_1 X0 X1 X2 = k2\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1) X2 \quad (3)$$

## Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. ((X0 \neq k1\_xboole\_0) \wedge ((X1 \neq k1\_xboole\_0) \wedge ((X2 \neq k1\_xboole\_0) \wedge (X3 \neq k1\_xboole\_0)))) \Leftrightarrow (k4\_zfmisc\_1 X0 X1 X2 X3 \neq k1\_xboole\_0)$$