

t16\_integra1 (TMdi-  
bRVYaiLmXWvxWc65FbThsUhh5taYHXc)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k7\_rfunct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (k1\_funct\_1 (k7\_rfunct\_1 X0 X0) X1 = np\_1)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(\neg v1\_xboole\_0 X1) \Rightarrow (\forall X2.(\neg v1\_xboole\_0 X2) \Rightarrow (\forall X3.((v1\_funct\_1 X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X2 X1)))) \Rightarrow ((v3\_funct\_1 (k2\_partfun1 X2 X1 X3 X0)) \Leftrightarrow \\ & (\forall X4.(m1\_subset\_1 X4 X2) \Rightarrow (\forall X5.(m1\_subset\_1 X5 X2) \Rightarrow (((X4 \in k9\_subset\_1 X2 X0 (k1\_relset\_1 X2 X3)) \wedge (X5 \in k9\_subset\_1 X2 X0 (k1\_relset\_1 X2 X3))) \Rightarrow (k1\_funct\_1 X3 X4 = k1\_funct\_1 X3 X5))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.k7\_rfunct\_1 X0 X1 = k4\_funct\_3 X0 X1 \quad (3)$$

Assume the following.

$$\neg v1\_xboole\_0 k1\_numbers \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_funct\_1 (k7\_rfunct\_1 X0 X1)) \wedge (m1\_subset\_1 (k7\_rfunct\_1 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k1\_numbers))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1 (k4\_funct\_3 X0 X1)) \wedge (v1\_funct\_1 (k4\_funct\_3 X0 X1)) \quad (6)$$

**Theorem 1**

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (v3\_funct\_1 (k2\_partfun1 X0 k1\_numbers \\ (k7\_rfunct\_1 X0 X0) X0))$$