

# l17\_integr11

(TMbj4bacCKJptTBy5coyPQqrCK2UeCcXViD)

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Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_fcont\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k2\_subset\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0\ np\_2) \wedge (m2\_subset\_1\ np\_2\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_2\ k1\_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1\ X1) \wedge (v4\_relat\_1\ X1\ X0)) \Rightarrow (k1\_relset\_1\ X0\ X1 = k9\_xtuple\_0\ X1) \quad (3)$$

Assume the following.

$$m1\_subset\_1\ k6\_numbers\ k1\_numbers \quad (4)$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \quad (5)$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_xreal\_0\ X0) \wedge (v1\_xreal\_0\ X1)) \Rightarrow ((v1\_funct\_1 \\ & (k1\_fcont\_1\ X0\ X1)) \wedge ((v1\_funct\_2\ (k1\_fcont\_1\ X0\ X1)\ k1\_numbers \\ & k1\_numbers) \wedge (m1\_subset\_1\ (k1\_fcont\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\ & k1\_numbers\ k1\_numbers)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.k2\_subset\_1 X0 = X0 \quad (8)$$

Assume the following.

$$k1\_xboole\_0 = the (\lambda X0 : \iota.v1\_xboole\_0 X0) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1))) \Rightarrow (((X1 \neq k1\_xboole\_0) \Rightarrow ((v1\_funct\_2 X2 X0 \\ & X1) \Leftrightarrow (X0 = k1\_relset\_1 X0 X2))) \wedge ((X1 = k1\_xboole\_0) \Rightarrow ((v1\_funct\_2 \\ & X2 X0 X1) \Leftrightarrow (X2 = k1\_xboole\_0)))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1))) \Rightarrow ((v4\_relat\_1 X2 X0) \wedge (v5\_relat\_1 X2 X1)) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1))) \Rightarrow (v1\_relat\_1 X2) \end{aligned} \quad (13)$$

**Theorem 1**  $k9\_xtuple\_0 (k1\_fcont\_1 np\_2 k6\_numbers) = k2\_subset\_1 k1\_numbers.$