

## t5\_integra7

(TMagvqniixrRCrzPtNM9G642YiXb5PXTtMn)

October 27, 2020

Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r2\_fdiff\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_rcomp\_1 : \iota \Rightarrow o$  be given. Let  $k5\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow ((r2\_fdiff\_1 X1 X0) \Rightarrow (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers))) \quad (1)$$

Assume the following.

$$\forall X0. ((v3\_rcomp\_1 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers))) \Rightarrow (\forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow ((r2\_fdiff\_1 (k5\_relset\_1 k1\_numbers k1\_numbers X1 X0) X0) \Rightarrow (r2\_fdiff\_1 X1 X0))) \quad (2)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (\forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow ((r2\_fdiff\_1 X1 X0) \Rightarrow (v3\_rcomp\_1 X0))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow (k5\_relset\_1 X0 X1 X2 X3 = k5\_relat\_1 X2 X3) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow (k2\_partfun1 X0 X1 X2 X3 = k5\_relat\_1 X2 X3) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1\_funct\_1 X2) \wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow ((v1\_funct\_1 \\ & (k2\_partfun1 X0 X1 X2 X3)) \wedge (m1\_subset\_1 (k2\_partfun1 X0 X1 X2 X3) \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \end{aligned} \tag{6}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \Rightarrow ((r2\_diff\_1 (k2\_partfun1 \\ & k1\_numbers k1\_numbers X1 X0) X0) \Rightarrow (r2\_diff\_1 X1 X0)) \end{aligned}$$