

## t57\_funct\_8

(TMcnfwsMux8U4YZsjpUZTCLXvJ3KTjkgAiH)

October 27, 2020

Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_8 : \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  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  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k2\_absvalue : \iota \Rightarrow \iota$  be given. Let  $k1\_absvalue : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1\_xboole\_0 X0) \wedge \\ & (((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1)))))) \wedge (m1\_subset\_1 X3 X0))) \Rightarrow (k3\_funct\_2 X0 \\ & X1 X2 X3 = k1\_funct\_1 X2 X3) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 k1\_numbers) \Rightarrow (k2\_absvalue X0 = k1\_absvalue X0) \quad (3)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & (v1\_funct\_1 k1\_funct\_8) \wedge ((v1\_funct\_2 k1\_funct\_8 k1\_numbers \\ & k1\_numbers) \wedge (m1\_subset\_1 k1\_funct\_8 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k1\_numbers k1\_numbers)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k1\_numbers k1\_numbers) \wedge \\ (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))))) \Rightarrow \\ ((X0 = k1\_funct\_8) \Leftrightarrow (\forall X1.(m1\_subset\_1 X1 k1\_numbers) \Rightarrow ( \\ k3\_funct\_2 k1\_numbers k1\_numbers X0 X1 = k2\_absvalue X1))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (((\neg r1\_xxreal\_0 X0 k6\_numbers) \Rightarrow ( \\ k1\_absvalue X0 = np\_1)) \wedge (((\neg r1\_xxreal\_0 k6\_numbers X0) \Rightarrow (k1\_absvalue \\ X0 = k1\_real\_1 np\_1)) \wedge (((r1\_xxreal\_0 X0 k6\_numbers) \wedge (r1\_xxreal\_0 \\ k6\_numbers X0)) \Rightarrow (k1\_absvalue X0 = k6\_numbers)))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Leftrightarrow (X0 \in k1\_numbers) \quad (8)$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((\neg r1\_xxreal\_0 k6\_numbers X0) \Rightarrow (k1\_funct\_1 \\ k1\_funct\_8 X0 = k1\_real\_1 np\_1))$$