

## t73\_funct\_8

(TMKJp7q3FsVz4M22CNWE6TkSczRF1AMtX3B)

October 27, 2020

Let  $v1\_funct\_8 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r1\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k55\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k16\_sin\_cos : \iota$  be given. Let  $r2\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_numbers : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.((v1\_funct\_8 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers))) \Rightarrow (r2\_funct\_8 X0 k1\_numbers k1\_numbers k16\_sin\_cos) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_funct\_8 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 k2\_numbers))) \Rightarrow \\ & (\forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k1\_numbers k1\_numbers)))) \Rightarrow ((r2\_funct\_8 X0 k1\_numbers k1\_numbers \\ & X1) \Rightarrow (r1\_funct\_8 X0 k1\_numbers k1\_numbers (k55\_valued\_1 k1\_numbers \\ & k1\_numbers X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X2)) \Rightarrow (r1\_tarski X0 X2) \quad (4)$$

Assume the following.

$$r1\_tarski k1\_numbers k2\_numbers \quad (5)$$

Assume the following.

$$(v1\_funct\_1 k16\_sin\_cos) \wedge ((v1\_funct\_2 k16\_sin\_cos k1\_numbers k1\_numbers) \wedge (m1\_subset\_1 k16\_sin\_cos (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers)))) \quad (6)$$

**Theorem 1**

$$\forall X0.((v1\_funct\_8 X0)\wedge(m1\_subset\_1 X0 (k1\_zfmisc.1 k1\_numbers)))\Rightarrow$$
$$(r1\_funct\_8 X0 k1\_numbers k1\_numbers (k55\_valued.1 k1\_numbers$$
$$k1\_numbers k16\_sin\_cos))$$