

# t67\_measure6 (TM- MERa6EUWrKhXmNHdELMEfwnqjrYyHnWa2)

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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  $k1\_numbers : \iota$  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  $v5\_measure6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v6\_measure6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k32\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $k30\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v3\_membered\ X1) \wedge ((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))) \Rightarrow (k32\_valued\_1\ X0\ X1\ X2 = k30\_valued\_1\ X2) \quad (1)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1. ((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ k1\_numbers) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))))) \Rightarrow ((v6\_measure6\ X1\ X0) \Rightarrow (v5\_measure6\ (k32\_valued\_1\ X0\ k1\_numbers\ X1)\ X0))) \quad (2)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1. ((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ k1\_numbers) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))))) \Rightarrow ((v5\_measure6\ X1\ X0) \Rightarrow (v6\_measure6\ (k32\_valued\_1\ X0\ k1\_numbers\ X1)\ X0))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v3\_membered\ X1) \wedge ((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))) \Rightarrow (k32\_valued\_1\ X0\ X1\ (k32\_valued\_1\ X0\ X1\ X2) = X2) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v1\_xboole\_0 X1)\wedge(v3\_membered \\ & X1))\wedge((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X0 X1)\wedge(m1\_subset\_1 X2 \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))))))\Rightarrow((v1\_funct\_1 (k30\_valued\_1 \\ & X2))\wedge(v1\_partfun1 (k30\_valued\_1 X2) X0)) \end{aligned} \tag{5}$$

Assume the following.

$$v3\_membered k1\_numbers \tag{6}$$

Assume the following.

$$\neg v1\_xboole\_0 k1\_numbers \tag{7}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v3\_membered X1)\wedge((v1\_funct\_1 \\ & X2)\wedge(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))\Rightarrow((v1\_funct\_1 \\ & (k32\_valued\_1 X0 X1 X2))\wedge(m1\_subset\_1 (k32\_valued\_1 X0 X1 X2) ( \\ & k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k1\_numbers)))) \end{aligned} \tag{8}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1)))\Rightarrow((v1\_partfun1 X2 X0)\Rightarrow(v1\_funct\_2 X2 X0 X1)) \end{aligned} \tag{9}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.((v1\_funct\_1 X1)\wedge \\ & (v1\_funct\_2 X1 X0 k1\_numbers)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 k1\_numbers))))\Rightarrow((v5\_measure6 X1 X0)\Leftrightarrow(v6\_measure6 (k32\_valued\_1 \\ & X0 k1\_numbers X1) X0))) \end{aligned}$$