# t26_mesfunc8 (TMXYRs4emJo7QZQmr2iVUrWeuDTL6GcP3Ra)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k4\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_numbers : \iota$ be given. Let $v1\_mesfunc8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_mesfunc5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v10\_mesfunc5 : \iota \Rightarrow o$ be given. Let $k3\_mesfunc5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_mesfunc5 : \iota \Rightarrow \iota$ be given. Let $k7\_mesfunc8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ k5\_numbers\ (k4\_partfun1\ X0\ k7\_numbers)) \wedge ((v1\_mesfunc8\ X2\ X0\ k7\_numbers) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k7\_numbers))))))) \Rightarrow (\forall X3.(m2\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)\ X1) \Rightarrow (((k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k7\_numbers\ X2\ k6\_numbers) = X3) \wedge ((\forall X4.(v7\_ordinal1\ X4) \Rightarrow (r1\_mesfunc1\ X0\ X1\ (k4\_mesfunc5\ X0\ k7\_numbers\ X2\ X4)\ X3)) \wedge (\forall X4.(m1\_subset\_1\ X4\ X0) \Rightarrow ((X4 \in X3) \Rightarrow (v10\_mesfunc5\ (k3\_mesfunc5\ X0\ X2\ X4)))))) \Rightarrow (r1\_mesfunc1\ X0\ X1\ (k7\_mesfunc8\ X0\ X2)\ X3)))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge(v1\_funct\_2\ X1\ k5\_numbers\ (k4\_partfun1\ X0\ k7\_numbers))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k7\_numbers))))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k7\_numbers))))\Rightarrow((X2 = k7\_mesfunc8\ X0\ X1)\Leftrightarrow((k1\_relset\_1\ X0\ X2 = k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k7\_numbers\ X1\ k6\_numbers))\wedge(\forall X3.(m1\_subset\_1\ X3\ X0)\Rightarrow((X3 \in k1\_relset\_1\ X0\ X2)\Rightarrow(k12\_supinf\_2\ X2\ X3 = k2\_mesfunc5\ (k3\_mesfunc5\ X0\ X1\ X3)))))))) \tag{2}$$

**Theorem 1**

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ k5\_numbers\ (k4\_partfun1\ X0\ k7\_numbers))\wedge((v1\_mesfunc8\ X2\ X0\ k7\_numbers)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k7\_numbers)))))))\Rightarrow(\forall X3.((v1\_funct\_1\ X3)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k7\_numbers))))\Rightarrow(\forall X4.(m2\_subset\_1\ X4\ (k1\_zfmisc\_1\ X0)\ X1)\Rightarrow(((k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k7\_numbers\ X2\ k6\_numbers) = X4)\wedge((\forall X5.(v7\_ordinal1\ X5)\Rightarrow(r1\_mesfunc1\ X0\ X1\ (k4\_mesfunc5\ X0\ k7\_numbers\ X2\ X5)\ X4))\wedge((k1\_relset\_1\ X0\ X3 = X4)\wedge(\forall X5.(m1\_subset\_1\ X5\ X0)\Rightarrow((X5 \in X4)\Rightarrow((v10\_mesfunc5\ (k3\_mesfunc5\ X0\ X2\ X5))\wedge(k12\_supinf\_2\ X3\ X5 = k2\_mesfunc5\ (k3\_mesfunc5\ X0\ X2\ X5))))))))\Rightarrow(r1\_mesfunc1\ X0\ X1\ X3\ X4))))))$$