t18_mesfun9c (TMYoaWh9Q2EASqm6jwKPg1tv5yPRf9J57Fr)

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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 $k1\_numbers : \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1\_mesfunc8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_mesfunc6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_mesfun9c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_series\_1 : \iota \Rightarrow o$ be given. Let $k10\_seqfunc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_mesfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8\_mesfun7c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_comseq\_2 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_series\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_rfunct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X2)) \wedge (v1\_xboole\_0\ X2)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge ((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge((v1\_mesfunc8\ X2\ X0\ k1\_numbers)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers)))))))\Rightarrow(\forall X3.(m2\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)\ X1)\Rightarrow(((k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k1\_numbers\ X2\ k6\_numbers) = X3)\wedge((\forall X4.(v7\_ordinal1\ X4)\Rightarrow(r1\_mesfunc6\ X0\ X1\ (k4\_mesfunc5\ X0\ k1\_numbers\ X2\ X4)\ X3))\wedge(\forall X4.(m1\_subset\_1\ X4\ X0)\Rightarrow((X4\in X3)\Rightarrow(v2\_comseq\_2\ (k10\_seqfunc\ X0\ X2\ X4))))))\Rightarrow(r1\_mesfunc1\ X0\ X1\ (k8\_mesfun7c\ X0\ X2)\ X3))))) \tag{3}$$

Assume the following.

$$m1\_subset\_1\ k1\_xboole\_0\ k4\_ordinal1 \tag{4}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))))))\Rightarrow((v1\_mesfunc8\ X1\ X0\ k1\_numbers)\Rightarrow(v1\_mesfunc8\ (k2\_mesfun9c\ X0\ X1)\ X0\ k1\_numbers))) \tag{5}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ X0)\Rightarrow(\forall X3.((v1\_mesfunc8\ X1\ X0\ k1\_numbers)\wedge((r1\_tarski\ X3\ (k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k1\_numbers\ X1\ k6\_numbers)))\wedge(X2\in X3)))\Rightarrow((v2\_comseq\_2\ (k3\_series\_1\ (k10\_seqfunc\ X0\ X1\ X2)))\Leftrightarrow(v2\_comseq\_2\ (k10\_seqfunc\ X0\ (k2\_mesfun9c\ X0\ X1)\ X2)))))) \tag{6}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))))))\Rightarrow(\forall X2.(v7\_ordinal1\ X2)\Rightarrow((v1\_mesfunc8\ X1\ X0\ k1\_numbers)\Rightarrow(k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k1\_numbers\ (k2\_mesfun9c\ X0\ X1)\ X2) = k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k1\_numbers\ X1\ k6\_numbers))))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ X0 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ X0\ X1)\Leftrightarrow(m1\_subset\_1\ X2\ X1)) \tag{9}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{10}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.k3\_rfunct\_3\ X0\ X1 = k4\_partfun1\ X0\ X1 \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers)))))))\Rightarrow ((v1\_funct\_1\ (k2\_mesfun9c\ X0\ X1))\wedge((v1\_funct\_2\ (k2\_mesfun9c\ X0\ X1)\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge(m1\_subset\_1\ (k2\_mesfun9c\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))))))) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge(((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))))))\wedge(m1\_subset\_1\ X2\ X0)))\Rightarrow((v1\_funct\_1\ (k10\_seqfunc\ X0\ X1\ X2))\wedge((v1\_funct\_2\ (k10\_seqfunc\ X0\ X1\ X2)\ k5\_numbers\ k1\_numbers)\wedge (m1\_subset\_1\ (k10\_seqfunc\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers))))) \tag{14}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k1\_numbers)\wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k1\_numbers)))))\Rightarrow ((v1\_series\_1\ X0)\Leftrightarrow(v2\_comseq\_2\ (k3\_series\_1\ X0))) \tag{15}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{16}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge ((v1\_prob\_1\ X1\ X0)\wedge((v4\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ X1)\Rightarrow(\forall X3.((v1\_funct\_1\ X3)\wedge((v1\_funct\_2\ X3\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k4\_partfun1\ X0\ k1\_numbers))))))\Rightarrow(((k1\_relset\_1\ X0\ (k4\_mesfunc5\ X0\ k1\_numbers\ X3\ k6\_numbers) = X2)\wedge((v1\_mesfunc8\ X3\ X0\ k1\_numbers)\wedge((\forall X4.(v7\_ordinal1\ X4)\Rightarrow(r1\_mesfunc6\ X0\ X1\ (k4\_mesfunc5\ X0\ k1\_numbers\ (k2\_mesfun9c\ X0\ X3)\ X4)\ X2))\wedge(\forall X4.(m1\_subset\_1\ X4\ X0)\Rightarrow((X4 \in X2)\Rightarrow(v1\_series\_1\ (k10\_seqfunc\ X0\ X3\ X4)))))))\Rightarrow(r1\_mesfunc1\ X0\ X1\ (k8\_mesfun7c\ X0\ (k2\_mesfun9c\ X0\ X3))\ X2)))))$$