t13_measure1 (TMYiwnqXfZiH-sWXfJW965RYFnJJa7XwnYEL)

October 27, 2020

Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v2\_finsub\_1 : \iota \Rightarrow o$ be given. Let $v1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k7\_numbers : \iota$ be given. Let $v10\_valued\_0 : \iota \Rightarrow o$ be given. Let $v6\_supinf\_2 : \iota \Rightarrow o$ be given. Let $v2\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $k1\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k1\_supinf\_2 : \iota$ be given. Let $v1\_finsub\_1 : \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v2\_valued\_0 : \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((v2\_finsub\_1\ X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X1\ k7\_numbers) \wedge ((v10\_valued\_0\ X2) \wedge ((v6\_supinf\_2\ X2) \wedge ((v2\_measure1\ X2\ X0\ X1) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k7\_numbers))))))))) \Rightarrow (\forall X3.(m2\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)\ X1) \Rightarrow (\forall X4.(m2\_subset\_1\ X4\ (k1\_zfmisc\_1\ X0)\ X1) \Rightarrow ((r1\_tarski\ X3\ X4) \Rightarrow (r1\_xxreal\_0\ (k12\_supinf\_2\ X2\ X3)\ (k12\_supinf\_2\ X2\ X4))))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (k1\_xxreal\_3\ X0\ k6\_numbers = X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ (k4\_xboole\_0\ X0\ X1)\ X0 \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xxreal\_0\ X1)\Rightarrow(((r1\_xxreal\_0\ X0\ X1)\wedge(r1\_xxreal\_0\ X1\ X0))\Rightarrow(X0 = X1))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ (k3\_xboole\_0\ X0\ X1)\ X0 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge ((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X1\ k7\_numbers)\wedge ((v10\_valued\_0\ X2)\wedge((v6\_supinf\_2\ X2)\wedge((v2\_measure1\ X2\ X0\ X1)\wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k7\_numbers))))))))\Rightarrow (\forall X3.(m2\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)\ X1)\Rightarrow(\forall X4. (m2\_subset\_1\ X4\ (k1\_zfmisc\_1\ X0)\ X1)\Rightarrow(r1\_xxreal\_0\ (k12\_supinf\_2\ X2\ (k1\_measure1\ X0\ X1\ X3\ X4))\ (k3\_supinf\_2\ (k12\_supinf\_2\ X2\ X3)\ (k12\_supinf\_2\ X2\ X4)))))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ X0\ X1)\Leftrightarrow(m1\_subset\_1\ X2\ X1)) \tag{7}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k7\_numbers)\wedge(m1\_subset\_1\ X1\ k7\_numbers))\Rightarrow(k3\_supinf\_2\ X0\ X1 = k1\_xxreal\_3\ X0\ X1) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\wedge((m1\_subset\_1\ X2\ X1)\wedge(m1\_subset\_1\ X3\ X1)))\Rightarrow (k3\_measure1\ X0\ X1\ X2\ X3 = k4\_xboole\_0\ X2\ X3) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\wedge((m1\_subset\_1\ X2\ X1)\wedge(m1\_subset\_1\ X3\ X1)))\Rightarrow (k2\_measure1\ X0\ X1\ X2\ X3 = k3\_xboole\_0\ X2\ X3) \tag{11}$$

Assume the following.

$$k1\_supinf\_2 = k1\_xboole\_0 \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0\ X1)\wedge((v1\_finsub\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))\wedge((m1\_subset\_1\ X2\ X1)\wedge(m1\_subset\_1\ X3\ X1)))\Rightarrow(k1\_measure1\ X0\ X1\ X2\ X3 = k2\_xboole\_0\ X2\ X3) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v2\_valued\_0\ X0)))\Rightarrow(k12\_supinf\_2\ X0\ X1 = k1\_funct\_1\ X0\ X1) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v2\_valued\_0\ X0)))\Rightarrow(v1\_xxreal\_0\ (k1\_funct\_1\ X0\ X1)) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X1\ k7\_numbers)\wedge((v10\_valued\_0\ X2)\wedge((v6\_supinf\_2\ X2)\wedge((v2\_measure1\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k7\_numbers))))))))))\Rightarrow(\forall X3.(m1\_measure1\ X3\ X0\ X1\ X2)\Rightarrow(m2\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)\ X1)) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\wedge((m1\_subset\_1\ X2\ X1)\wedge(m1\_subset\_1\ X3\ X1)))\Rightarrow(m2\_subset\_1\ (k3\_measure1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ X0)\ X1) \tag{17}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\wedge((m1\_subset\_1\ X2\ X1)\wedge(m1\_subset\_1\ X3\ X1)))\Rightarrow(m2\_subset\_1\ (k2\_measure1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ X0)\ X1) \tag{18}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1\_xboole\_0\ X1)\wedge((v1\_finsub\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))))\wedge((m1\_subset\_1\ X2\ X1)\wedge(m1\_subset\_1\ X3\ X1)))\Rightarrow(m2\_subset\_1\ (k1\_measure1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ X0)\ X1) \tag{19}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v2\_valued\_0\ X0)))\Rightarrow(m1\_subset\_1\ (k12\_supinf\_2\ X0\ X1)\ k7\_numbers) \tag{20}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X1\ k7\_numbers)\wedge((v10\_valued\_0\ X2)\wedge((v6\_supinf\_2\ X2)\wedge((v2\_measure1\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k7\_numbers))))))))\Rightarrow(\forall X3.(m2\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)\ X1)\Rightarrow((m1\_measure1\ X3\ X0\ X1\ X2)\Leftrightarrow(k12\_supinf\_2\ X2\ X3 = k1\_supinf\_2)))) \tag{21}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ X0\ k7\_numbers)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k7\_numbers)))))\Rightarrow((v6\_supinf\_2\ X1)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ X0)\Rightarrow(r1\_xxreal\_0\ k1\_supinf\_2\ (k12\_supinf\_2\ X1\ X2))))) \tag{22}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow((v4\_relat\_1\ X2\ X0)\wedge(v5\_relat\_1\ X2\ X1)) \tag{23}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))\Rightarrow(((v2\_finsub\_1\ X1)\wedge(v1\_prob\_1\ X1\ X0))\Rightarrow(v1\_finsub\_1\ X1)) \tag{24}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v5\_relat\_1\ X0\ k7\_numbers))\Rightarrow((v1\_relat\_1\ X0)\wedge(v2\_valued\_0\ X0)) \tag{25}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_xboole\_0\ X1)) \tag{26}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{27}$$

Theorem 1

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v2\_finsub\_1\ X1)\wedge((v1\_prob\_1\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X1\ k7\_numbers)\wedge((v10\_valued\_0\ X2)\wedge((v6\_supinf\_2\ X2)\wedge((v2\_measure1\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k7\_numbers))))))))\Rightarrow(\forall X3.(m1\_measure1\ X3\ X0\ X1\ X2)\Rightarrow(\forall X4.(m1\_measure1\ X4\ X0\ X1\ X2)\Rightarrow((m1\_measure1\ (k1\_measure1\ X0\ X1\ X3\ X4)\ X0\ X1\ X2)\wedge((m1\_measure1\ (k2\_measure1\ X0\ X1\ X3\ X4)\ X0\ X1\ X2)\wedge(m1\_measure1\ (k3\_measure1\ X0\ X1\ X3\ X4)\ X0\ X1\ X2))))))$$