

# t36\_measure1 (TMcfbx- pzM3UraMNTx8WARDAb9ionQ7gA6GA)

October 27, 2020

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  $k7\_numbers : \iota$  be given. Let  $v10\_valued\_0 : \iota \Rightarrow o$  be given. Let  $v6\_supinf\_2 : \iota \Rightarrow o$  be given. Let  $v4\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  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  $m2\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_finsub\_1 : \iota \Rightarrow o$  be given. Let  $m1\_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k12\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_supinf\_2 : \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v1\_prob\_1 X1 X0) \wedge \\
& ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\
& X0)))))) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 X1 k7\_numbers) \wedge \\
& ((v10\_valued\_0 X2) \wedge ((v6\_supinf\_2 X2) \wedge ((v4\_measure1 X2 X0 X1) \wedge \\
& (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k7\_numbers))))))) \Rightarrow \\
& ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 X1 k7\_numbers) \wedge ((v10\_valued\_0 \\
& X2) \wedge ((v6\_supinf\_2 X2) \wedge ((v2\_measure1 X2 X0 X1) \wedge (m1\_subset\_1 X2 \\
& (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k7\_numbers))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v2\_finsub\_1 X1) \wedge \\
& ((v1\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\
& X0)))))) \Rightarrow (\forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 X1 k7\_numbers) \wedge \\
& ((v10\_valued\_0 X2) \wedge ((v6\_supinf\_2 X2) \wedge ((v2\_measure1 X2 X0 X1) \wedge \\
& (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k7\_numbers))))))) \Rightarrow \\
& (\forall X3. (m2\_subset\_1 X3 (k1\_zfmisc\_1 X0) X1) \Rightarrow (\forall X4. \\
& (m1\_measure1 X4 X0 X1 X2) \Rightarrow ((r1\_tarski X3 X4) \Rightarrow (m1\_measure1 X3 X0 \\
& X1 X2))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v1\_xboole\_0 X1)\wedge((v1\_prob\_1 \\ & X1 X0)\wedge((v4\_prob\_1 X1 X0)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))))))\wedge((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X1 k7\_numbers)\wedge(( \\ & v10\_valued\_0 X2)\wedge((v6\_supinf\_2 X2)\wedge((v4\_measure1 X2 X0 X1)\wedge( \\ & m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k7\_numbers))))))))))\Rightarrow \\ & (\forall X3.(m2\_measure1 X3 X0 X1 X2)\Rightarrow(m2\_subset\_1 X3 (k1\_zfmisc\_1 \\ & X0) X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1\_xboole\_0 X1)\wedge((v1\_prob\_1 X1 X0)\wedge \\ & ((v4\_prob\_1 X1 X0)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))))))\Rightarrow(\forall X2.((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X1 k7\_numbers)\wedge \\ & ((v10\_valued\_0 X2)\wedge((v6\_supinf\_2 X2)\wedge((v4\_measure1 X2 X0 X1)\wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k7\_numbers))))))))))\Rightarrow \\ & (\forall X3.(m2\_subset\_1 X3 (k1\_zfmisc\_1 X0) X1)\Rightarrow((m2\_measure1 \\ & X3 X0 X1 X2)\Leftrightarrow(k12\_supinf\_2 X2 X3 = k1\_supinf\_2))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1\_xboole\_0 X1)\wedge((v2\_finsub\_1 X1)\wedge \\ & ((v1\_prob\_1 X1 X0)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))))))\Rightarrow(\forall X2.((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X1 k7\_numbers)\wedge \\ & ((v10\_valued\_0 X2)\wedge((v6\_supinf\_2 X2)\wedge((v2\_measure1 X2 X0 X1)\wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k7\_numbers))))))))))\Rightarrow \\ & (\forall X3.(m2\_subset\_1 X3 (k1\_zfmisc\_1 X0) X1)\Rightarrow((m1\_measure1 \\ & X3 X0 X1 X2)\Leftrightarrow(k12\_supinf\_2 X2 X3 = k1\_supinf\_2))) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))\Rightarrow(((\neg v1\_xboole\_0 X1)\wedge((v1\_prob\_1 X1 X0)\wedge(v4\_prob\_1 X1 X0))\Rightarrow \\ & ((\neg v1\_xboole\_0 X1)\wedge((v2\_finsub\_1 X1)\wedge((v1\_prob\_1 X1 X0)\wedge(v4\_prob\_1 \\ & X1 X0)))))) \end{aligned} \tag{6}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1\_xboole\_0 X1)\wedge((v1\_prob\_1 X1 X0)\wedge \\ & ((v4\_prob\_1 X1 X0)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))))))\Rightarrow(\forall X2.((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X1 k7\_numbers)\wedge \\ & ((v10\_valued\_0 X2)\wedge((v6\_supinf\_2 X2)\wedge((v4\_measure1 X2 X0 X1)\wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k7\_numbers))))))))))\Rightarrow \\ & (\forall X3.(m2\_subset\_1 X3 (k1\_zfmisc\_1 X0) X1)\Rightarrow(\forall X4. \\ & (m2\_measure1 X4 X0 X1 X2)\Rightarrow((r1\_tarski X3 X4)\Rightarrow(m2\_measure1 X3 X0 \\ & X1 X2)))) \end{aligned}$$