

## t24\_prob\_4

(TMa1ye2oy7U4s7SWp8TJNHQ73syEUCBREmP)

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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  $m2\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_prob\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Assume the following.

$$\forall X0. r1\_tarski\ k1\_xboole\_0\ X0 \tag{1}$$

Assume the following.

$$\forall X0. m1\_subset\_1\ k1\_xboole\_0\ (k1\_zfmisc\_1\ X0) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0\ X0) \wedge (((\neg v1\_xboole\_0 \\ & X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ & (k1\_zfmisc\_1\ X0)))))) \wedge (m2\_prob\_1\ X2\ X0\ X1))) \Rightarrow (\exists X3. m1\_prob\_4 \\ & X3\ X0\ X1\ X2) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0\ X0) \wedge (((\neg v1\_xboole\_0 \\ & X1) \wedge ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ & (k1\_zfmisc\_1\ X0)))))) \wedge (m2\_prob\_1\ X2\ X0\ X1))) \Rightarrow (\forall X3. (m1\_prob\_4 \\ & X3\ X0\ X1\ X2) \Rightarrow (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0\ X1) \wedge \\ & ((v1\_prob\_1\ X1\ X0) \wedge ((v4\_prob\_1\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ & (k1\_zfmisc\_1\ X0)))))) \Rightarrow (\forall X2. (m2\_prob\_1\ X2\ X0\ X1) \Rightarrow (\forall X3. \\ & (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0) \Rightarrow ((m1\_prob\_4\ X3\ X0\ X1\ X2) \Leftrightarrow (\exists X4. \\ & (X4 \in X1) \wedge ((r1\_tarski\ X3\ X4) \wedge (k1\_funct\_1\ X2\ X4 = k6\_numbers)))))) \end{aligned} \tag{5}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0 X1) \wedge \\ & ((v1\_prob\_1 X1 X0) \wedge ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k1\_zfmisc\_1 X0)))))) \Rightarrow (\forall X2.(m2\_prob\_1 X2 X0 X1) \Rightarrow (m1\_prob\_4 \\ & k1\_xboole\_0 X0 X1 X2))) \end{aligned}$$