

# t31\_prob\_2

(TMJ859uHuyaZpPJjUTYWFTEqvhizzyiCugf)

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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  $m1\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k7\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_prob\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge \\
& ((v1\_prob\_1 X1 X0) \wedge ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\
& (k1\_zfmisc\_1 X0)))))) \Rightarrow (\forall X2. (m2\_prob\_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& (m1\_prob\_1 X3 X0 X1) \Rightarrow (\forall X4. (m1\_prob\_1 X4 X0 X1) \Rightarrow ((\neg r1\_xxreal\_0 \\
& (k1\_seq\_1 X2 X3) k6\_numbers) \Rightarrow (k1\_seq\_1 X2 (k5\_prob\_1 X0 X1 X4 X3) = \\
& k8\_real\_1 (k1\_seq\_1 (k3\_prob\_2 X0 X1 X2 X3) X4) (k1\_seq\_1 X2 X3))))))))) \\
& \tag{1}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge \\
& ((v1\_prob\_1 X1 X0) \wedge ((v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\
& (k1\_zfmisc\_1 X0)))))) \Rightarrow (\forall X2. (m1\_prob\_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& (m1\_prob\_1 X3 X0 X1) \Rightarrow (\forall X4. (m1\_prob\_1 X4 X0 X1) \Rightarrow (\forall X5. \\
& (m2\_prob\_1 X5 X0 X1) \Rightarrow ((X2 = k3\_subset\_1 X0 X3) \Rightarrow (k1\_seq\_1 X5 X4 = k7\_real\_1 \\
& (k1\_seq\_1 X5 (k5\_prob\_1 X0 X1 X4 X3)) (k1\_seq\_1 X5 (k5\_prob\_1 X0 X1 \\
& X4 X2)))))))))) \\
& \tag{2}
\end{aligned}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0 X1) \wedge \\ & ((v1\_prob\_1 X1 X0) \wedge (v4\_prob\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k1\_zfmisc\_1 X0)))))) \Rightarrow (\forall X2.(m2\_prob\_1 X2 X0 X1) \Rightarrow (\forall X3. \\ & (m1\_prob\_1 X3 X0 X1) \Rightarrow (\forall X4.(m1\_prob\_1 X4 X0 X1) \Rightarrow (\forall X5. \\ & (m1\_prob\_1 X5 X0 X1) \Rightarrow ((X5 = k3\_subset\_1 X0 X4) \Rightarrow ((r1\_xxreal\_0 (k1\_seq\_1 \\ & X2 X4) k6\_numbers) \vee ((r1\_xxreal\_0 (k1\_seq\_1 X2 X5) k6\_numbers) \vee \\ & (k1\_seq\_1 X2 X3 = k7\_real\_1 (k8\_real\_1 (k1\_seq\_1 (k3\_prob\_2 X0 X1 \\ & X2 X4) X3) (k1\_seq\_1 X2 X4)) (k8\_real\_1 (k1\_seq\_1 (k3\_prob\_2 X0 X1 \\ & X2 X5) X3) (k1\_seq\_1 X2 X5)))))))))) \end{aligned}$$