

## t32\_prob\_3

(TMF3XDCh1G15XVwbhwi2f8by1SQFKTdZxdL)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. 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  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_prob\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.\forall X2.\forall X3. \\ & ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 k5\_numbers (k9\_setfam\_1 X1)) \wedge \\ & (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (k9\_setfam\_1 \\ & X1)))))) \Rightarrow ((X2 \in k1\_funct\_1 (k3\_prob\_3 X1 X3) X0) \Leftrightarrow ((X2 \in k1\_funct\_1 \\ & X3 X0) \wedge (\forall X4.(v7\_ordinal1 X4) \Rightarrow (\neg(\neg r1\_xxreal\_0 X0 X4) \wedge \\ & X2 \in k1\_funct\_1 X3 X4)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.k9\_setfam\_1 X0 = k1\_zfmisc\_1 X0 \tag{2}$$

### Theorem 1

$$\begin{aligned} & \forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.\forall X2.\forall X3. \\ & ((\neg v1\_xboole\_0 X3) \wedge ((v1\_prob\_1 X3 X1) \wedge ((v4\_prob\_1 X3 X1) \wedge (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X1)))))) \Rightarrow (\forall X4.((v5\_relat\_1 \\ & X4 X3) \wedge ((v1\_funct\_1 X4) \wedge ((v1\_funct\_2 X4 k5\_numbers (k9\_setfam\_1 \\ & X1)) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (k9\_setfam\_1 \\ & X1)))))) \Rightarrow ((X2 \in k1\_funct\_1 (k3\_prob\_3 X1 X4) X0) \Leftrightarrow ((X2 \in k1\_funct\_1 \\ & X4 X0) \wedge (\forall X5.(v7\_ordinal1 X5) \Rightarrow (\neg(\neg r1\_xxreal\_0 X0 X5) \wedge \\ & X2 \in k1\_funct\_1 X4 X5)))))) \end{aligned}$$