

# t13\_random\_1 (TMYuPtczABzuTfwYpGZr- jSA2wMYVfvq4TY3)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $m2\_prob\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_random\_1 : \iota \Rightarrow \iota$  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  $k1\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k5\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_mesfunc6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_prob\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k18\_rvsum\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_uproots : \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_finset\_1 X0) \Rightarrow (k3\_finseq\_1 (k1\_uproots X0) = k5\_card\_1 X0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_finset\_1 X0)) \Rightarrow (\forall X1. \\ & (m2\_prob\_1 X1 X0 (k1\_random\_1 X0)) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge \\ & ((v1\_funct\_2 X2 X0 k1\_numbers) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 ( \\ & k2\_zfmisc\_1 X0 k1\_numbers)))))) \Rightarrow (\exists X3.(m2\_finseq\_1 X3 k1\_numbers) \wedge \\ & ((k3\_finseq\_1 X3 = k5\_card\_1 X0) \wedge ((\forall X4.(v7\_ordinal1 X4) \Rightarrow \\ & ((X4 \in k4\_finseq\_1 X3) \Rightarrow (k1\_seq\_1 X3 X4 = k8\_real\_1 (k1\_seq\_1 X2 ( \\ & k1\_funct\_1 (k1\_uproots X0) X4)) (k1\_seq\_1 X1 (k1\_tarski (k1\_funct\_1 \\ & (k1\_uproots X0) X4)))))) \wedge (k1\_mesfunc6 X0 (k1\_random\_1 X0) (k2\_prob\_4 \\ & X0 (k1\_random\_1 X0) X1) X2 = k18\_rvsum\_1 X3)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v1\_finset\_1 X0) \Rightarrow ((v2\_funct\_1 (k1\_uproots X0)) \wedge (v2\_funct\_2 (k1\_uproots X0) X0)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0) \Rightarrow ((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 X1))) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_finset\_1 X0) \Rightarrow (m2\_finseq\_1 (k1\_uproots X0) X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1) \wedge (v5\_relat\_1 X1 X0)) \Rightarrow ((v2\_funct\_2 X1 X0) \Leftrightarrow (k2\_relset\_1 X0 X1 = X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0) \Rightarrow (v5\_relat\_1 X1 X0) \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_finset\_1 X0)) \Rightarrow (\forall X1. \\ & (m2\_prob\_1 X1 X0 (k1\_random\_1 X0)) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge \\ & ((v1\_funct\_2 X2 X0 k1\_numbers) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 ( \\ & k2\_zfmisc\_1 X0 k1\_numbers)))))) \Rightarrow (\exists X3.(m2\_finseq\_1 X3 k1\_numbers) \wedge \\ & (\exists X4.(m2\_finseq\_1 X4 X0) \wedge ((k3\_finseq\_1 X3 = k5\_card\_1 X0) \wedge \\ & ((v2\_funct\_1 X4) \wedge ((k2\_relset\_1 X0 X4 = X0) \wedge ((k3\_finseq\_1 X4 = k5\_card\_1 \\ & X0) \wedge ((\forall X5.(v7\_ordinal1 X5) \Rightarrow ((X5 \in k4\_finseq\_1 X3) \Rightarrow (k1\_seq\_1 \\ & X3 X5 = k8\_real\_1 (k1\_seq\_1 X2 (k1\_funct\_1 X4 X5)) (k1\_seq\_1 X1 (k1\_tarski \\ & (k1\_funct\_1 X4 X5)))))) \wedge (k1\_mesfunc6 X0 (k1\_random\_1 X0) (k2\_prob\_4 \\ & X0 (k1\_random\_1 X0) X1) X2 = k18\_rvsum\_1 X3)))))))))) \end{aligned}$$