

t16_finance1

(TMVEwYYJ4RUqtXqbWXQnhEpxnoY5dKfah82)

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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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_finance1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k12_prob_1 : \iota$ be given. Let $k3_random_2 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_finance1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_mesfunc6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_random_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 X0 k1_numbers) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k1_numbers)))))) \Rightarrow ((r1_finance1 X0 k1_numbers X1 k12_prob_1 X2) \Rightarrow \\ & ((r1_mesfunc6 X0 X1 X2 (k4_prob_1 X0 X1)) \wedge (m1_random_1 X2 X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & (\neg v1_xboole_0 k12_prob_1) \wedge ((v1_prob_1 k12_prob_1 k1_numbers) \wedge \\ & ((v4_prob_1 k12_prob_1 k1_numbers) \wedge (m1_subset_1 k12_prob_1 \\ & (k1_zfmisc_1 (k1_zfmisc_1 k1_numbers)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X2) \wedge ((v1_prob_1 \\ & X2 X0) \wedge ((v4_prob_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X3. ((\neg v1_xboole_0 X3) \wedge ((v1_prob_1 X3 X1) \wedge \\ & ((v4_prob_1 X3 X1) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X1)))))) \Rightarrow (k6_finance1 X0 X1 X2 X3 = \text{ReplSep} (\lambda X4 : \iota. \\ & (v1_funct_1 X4) \wedge ((v1_funct_2 X4 X0 X1) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))))) (\lambda X4 : \iota. r1_finance1 X0 X1 X2 X3 X4) \\ & (\lambda X4 : \iota. X4)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarSKI X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\ ((v1_prob_1 X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_zfmisc_1 X0))))))\Rightarrow(k3_random_2 X0 X1 = ReplSep (toset (\lambda X2 : \\ \iota.m1_random_1 X2 X0 X1)) (\lambda X2 : \iota.True) (\lambda X2 : \iota.X2))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\ ((v1_prob_1 X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_zfmisc_1 X0))))))\Rightarrow(r1_tarSKI (k6_finance1 X0 k1_numbers \\ X1 k12_prob_1) (k3_random_2 X0 X1))) \end{aligned}$$