

t4_finance1

(TMWEDR93m6u1oeA4fAWCjaGH1LbuugZahnA)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k12_prob_1 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k2_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v2_finsub_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\neg(X0 \in k1_numbers) \wedge (r1_xxreal_0 k1_xxreal_0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((m2_subset_1 (k3_rcomp_1 X0 k1_xxreal_0) (k1_zfmisc_1 k1_numbers) k12_prob_1) \wedge (m2_subset_1 (k2_rcomp_1 k2_xxreal_0 X0) (k1_zfmisc_1 k1_numbers) k12_prob_1)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2.(v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow ((r1_xxreal_0 X2 X3) \Rightarrow ((r1_xxreal_0 X1 X0) \vee (k3_xboole_0 (k4_xxreal_1 X0 X2) (k2_xxreal_1 X1 X3) = k2_xxreal_1 X1 X2)))))) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\neg(X0 \in k1_numbers) \wedge (r1_xxreal_0 X0 k2_xxreal_0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (k3_rcomp_1 X0 X1 = k2_xxreal_1 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (k2_rcomp_1 X0 X1 = k4_xxreal_1 X0 X1) \quad (9)$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \quad (10)$$

Assume the following.

$$v1_xxreal_0 k1_xxreal_0 \quad (11)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k1_zfmisc_1 X0) \quad (12)$$

Assume the following.

$$(\neg v1_xboole_0 k12_prob_1) \wedge ((v1_prob_1 k12_prob_1 k1_numbers) \wedge ((v4_prob_1 k12_prob_1 k1_numbers) \wedge (m1_subset_1 k12_prob_1 (k1_zfmisc_1 (k1_zfmisc_1 k1_numbers)))))) \quad (13)$$

Assume the following.

$$k1_xxreal_0 = k1_numbers \quad (14)$$

Assume the following.

$$\forall X0.(v2_finsub_1 X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow (k3_xboole_0 X1 X2 \in X0)) \quad (15)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow ((r1_xxreal_0 X0 X1) \vee (r1_xxreal_0 X1 X0)) \quad (17)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ X0))) \Rightarrow (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 X1 X0))) \Rightarrow \\ ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 \\ X1 X0)))))) \end{aligned} \quad (19)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (m2_subset_1 \\ (k3_rcomp_1 X1 X0) (k1_zfmisc_1 k1_numbers) k12_prob_1))$$