

l26_fib_num4

(TMFhoJyeobXSyJabzHCzRaUNqZTMfUiixVc)

October 27, 2020

Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_square_1 : \iota \Rightarrow \iota$ be given. Let $np_5 : \iota$ be given. Let $np_3 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k7_binop_2 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $c1_xreal_1 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 X1) \Leftrightarrow (r1_xxreal_0 (k2_xcmplx_0 \\ & X0 X2) (k2_xcmplx_0 X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 \\ & X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee ((v3_xxreal_0 X0) \vee (v2_xxreal_0 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(r1_xxreal_0 \\ & X0 X1) \wedge ((\neg v3_xxreal_0 X0) \wedge (v3_xxreal_0 X1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_5) \wedge (m2_subset_1 np_5 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_5 k5_numbers) \wedge (m1_subset_1 np_5 k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_3) \wedge (m2_subset_1 np_3 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_3 k5_numbers) \wedge (m1_subset_1 np_3 k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & ((v2_xreal_0 \ np_2) \wedge (m2_subset_1 \ np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_2 \ k5_numbers) \wedge (m1_subset_1 \ np_2 \ k1_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (8)$$

Assume the following.

$$\neg r1_xreal_0 \ (k7_square_1 \ np_5) \ k6_numbers \quad (9)$$

Assume the following.

$$\neg r1_xreal_0 \ (k7_square_1 \ np_5) \ np_2 \quad (10)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (k7_binop_2 \ (k7_binop_2 \ X0) = X0) \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 \ X0) \Rightarrow & ((v1_xcmplx_0 \ (k4_xcmplx_0 \ X0)) \wedge \\ & (v1_xreal_0 \ (k4_xcmplx_0 \ X0))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v3_xreal_0 \ X0) \wedge & (v1_xreal_0 \ X0)) \Rightarrow ((v1_xcmplx_0 \\ & (k4_xcmplx_0 \ X0)) \wedge (\neg v2_xreal_0 \ (k4_xcmplx_0 \ X0))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (m1_subset_1 \ (k7_square_1 \ X0) \ k1_numbers) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (m1_subset_1 \ (k7_binop_2 \ X0) \ k1_numbers) \quad (15)$$

Assume the following.

$$c1_xreal_1 = k6_numbers \quad (16)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_xreal_0 \ X0) \wedge & (v1_xreal_0 \ X1)) \Rightarrow (\\ & (r1_xreal_0 \ X0 \ X1) \vee (r1_xreal_0 \ X1 \ X0)) \end{aligned} \quad (17)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k5_numbers) \Rightarrow (\neg v3_xreal_0 \ X0) \quad (18)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \quad (19)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \quad (20)$$

Theorem 1

$$\neg r1_{xreal_0} (k2_{xcplx_0} (k7_square_1 \text{ } np_5) \text{ } np_3) (k2_{xcplx_0} \\ (k4_{xcplx_0} (k7_square_1 \text{ } np_5)) \text{ } np_3)$$