

t1_fib_num
(TMbFjGU99WyimUchTcRg72BrXvYL2uiyNw2)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k3_int_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_nat_d : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (((r1_nat_d X0 X1) \wedge (r1_nat_d X0 X2)) \Rightarrow (r1_nat_d \\ & X0 (k2_xcmplx_0 X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (((r1_nat_d X0 X1) \wedge (r1_nat_d X0 (k2_xcmplx_0 \\ & X1 X2))) \Rightarrow (r1_nat_d X0 X2)))))) \end{aligned} \tag{2}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1_subset_1 X0 k5_numbers) \wedge (v7_ordinal1 \\ & X1)) \Rightarrow (k2_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \tag{4}$$

Assume the following.

$$v6_membered k4_ordinal1 \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v7_ordinal1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (\\ & v7_ordinal1 (k2_xcmplx_0 X0 X1)) \end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_int_1 X0) \wedge (v1_int_1 X1)) \Rightarrow (v7_ordinal1 \\ & (k3_int_2 X0 X1)) \end{aligned} \tag{7}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1\ X2) \Rightarrow ((X2 = k3_int_2\ X0\ X1) \Leftrightarrow ((r1_nat_d\ X2\ X0) \wedge ((r1_nat_d \\ & X2\ X1) \wedge (\forall X3.(v7_ordinal1\ X3) \Rightarrow (((r1_nat_d\ X3\ X0) \wedge (r1_nat_d \\ & X3\ X1)) \Rightarrow (r1_nat_d\ X3\ X2)))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1\ X0) \wedge (v1_int_1\ X1)) \Rightarrow (k3_int_2\ X0\ X1 = k3_int_2\ X1\ X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k5_numbers) \wedge (v7_ordinal1\ X1)) \Rightarrow (k2_nat_1\ X0\ X1 = k2_nat_1\ X1\ X0) \quad (10)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (v1_int_1\ X0) \quad (11)$$

Assume the following.

$$\forall X0.(v6_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow (v7_ordinal1\ X1)) \quad (12)$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ k5_numbers) \Rightarrow (\forall X1.(m1_subset_1\ X1\ k5_numbers) \Rightarrow (k3_int_2\ X0\ X1 = k3_int_2\ X0\ (k2_nat_1\ X1\ X0)))$$