

t20_gr_cy_3 (TMEwZFZEKQM- CtLK7i4ycV2wFn5stTfHAQns)

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Let $k1_gr_cy_3 : \iota \Rightarrow \iota$ be given. Let $np_5 : \iota$ be given. Let $np_31 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $np_4 : \iota$ be given. Let $np_3 : \iota$ be given. Let $np_32 : \iota$ be given. Let $np_2 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_8 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k2_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v1_xcmplx_0 X2) \Rightarrow (k1_newton X2 (k2_xcmplx_0 X0 X1) = k3_xcmplx_0 \\ & (k1_newton X2 X0) (k1_newton X2 X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_5) \wedge (m2_subset_1 np_5 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_5 k5_numbers) \wedge (m1_subset_1 np_5 k1_numbers)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_4) \wedge (m2_subset_1 np_4 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_4 k5_numbers) \wedge (m1_subset_1 np_4 k1_numbers)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_3) \wedge (m2_subset_1 np_3 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_3 k5_numbers) \wedge (m1_subset_1 np_3 k1_numbers)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_32) \wedge (m2_subset_1 np_32 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_32 k5_numbers) \wedge (m1_subset_1 np_32 k1_numbers)) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_2) \wedge (m2_subset_1 \ np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_2 \ k5_numbers) \wedge (m1_subset_1 \ np_2 \ k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (\\ & k2_xcmplx_0 \ X0 \ (k4_xcmplx_0 \ X1) = k6_xcmplx_0 \ X0 \ X1) \end{aligned} \quad (7)$$

Assume the following.

$$k4_xcmplx_0 \ (k4_xcmplx_0 \ np_2) = np_2 \quad (8)$$

Assume the following.

$$k4_xcmplx_0 \ (k4_xcmplx_0 \ np_1) = np_1 \quad (9)$$

Assume the following.

$$k3_xcmplx_0 \ np_8 \ np_4 = np_32 \quad (10)$$

Assume the following.

$$k2_xcmplx_0 \ (k4_xcmplx_0 \ np_5) \ np_4 = k4_xcmplx_0 \ np_1 \quad (11)$$

Assume the following.

$$k2_xcmplx_0 \ np_3 \ np_2 = np_5 \quad (12)$$

Assume the following.

$$k2_xcmplx_0 \ np_32 \ (k4_xcmplx_0 \ np_1) = np_31 \quad (13)$$

Assume the following.

$$k2_xcmplx_0 \ np_2 \ np_2 = np_4 \quad (14)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (15)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 \ X0 \ k1_numbers) \wedge (v7_ordinal1 \\ & X1)) \Rightarrow (k2_newton \ X0 \ X1 = k1_newton \ X0 \ X1) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 \ X0 \ k5_numbers) \wedge (m1_subset_1 \\ & X1 \ k5_numbers)) \Rightarrow (k13_newton \ X0 \ X1 = k1_newton \ X0 \ X1) \end{aligned} \quad (17)$$

Assume the following.

$$k13_newton\ np_2\ np_3 = np_8 \quad (18)$$

Assume the following.

$$k13_newton\ np_2\ np_2 = np_4 \quad (19)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (k4_xcmplx_0\ (k4_xcmplx_0\ X0) = X0) \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0\ X0) \wedge (v1_xreal_0\ X1)) \Rightarrow (v1_xreal_0\ (k2_xcmplx_0\ X0\ X1)) \quad (21)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0) \Rightarrow ((v1_xcmplx_0\ (k4_xcmplx_0\ X0)) \wedge (v1_xreal_0\ (k4_xcmplx_0\ X0))) \quad (22)$$

Assume the following.

$$\forall X0.(v1_int_1\ X0) \Rightarrow ((v1_xcmplx_0\ (k4_xcmplx_0\ X0)) \wedge (v1_int_1\ (k4_xcmplx_0\ X0))) \quad (23)$$

Assume the following.

$$\forall X0.\forall X1.((v1_int_1\ X0) \wedge (v1_int_1\ X1)) \Rightarrow (v1_int_1\ (k2_xcmplx_0\ X0\ X1)) \quad (24)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (k1_gr_cy_3\ X0 = k6_xcmplx_0\ (k2_newton\ np_2\ X0)\ np_1) \quad (25)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \quad (26)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0) \Rightarrow (v1_xcmplx_0\ X0) \quad (27)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (v1_int_1\ X0) \quad (28)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers) \Rightarrow (v1_xreal_0\ X0) \quad (29)$$

Theorem 1 $k1_gr_cy_3\ np_5 = np_31$.