

t34_gr_cy_3 (TMRcDi-
WBW5WLhaefNep6fBVpXVgpeZck7wN)

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Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r2_int_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_int_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((k6_int_1 X1 X0 = k6_int_1 X2 X0) \Rightarrow ((X0 = k6_numbers) \vee \\ & (r2_int_1 X1 X2 X0)))) \wedge ((r2_int_1 X1 X2 X0) \Rightarrow (k6_int_1 X1 X0 = k6_int_1 \\ & X2 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (k6_int_1 (k1_newton X0 X1) X2 = k6_int_1 (k1_newton \\ & (k6_int_1 X0 X2) X1) X2))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_int_1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (v1_int_1 (k1_newton X0 X1)) \tag{3}$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \tag{4}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (\forall X3.(v7_ordinal1 X3) \Rightarrow ((r2_int_1 X0 \\ & X1 X2) \Rightarrow ((X2 = k6_numbers) \vee (r2_int_1 (k1_newton X0 X3) (k1_newton \\ & X1 X3) X2)))))) \end{aligned}$$