# t30_gr_cy_3 (TMWnebg-gQuT4kVZE6PNDqoNbZCEjQAbQoMo)

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Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k6\_int\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (k6\_int\_1\ (k6\_int\_1\ X1\ X0)\ X0 = k6\_int\_1\ X1\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (\forall X2.(v1\_int\_1\ X2) \Rightarrow (\forall X3.(v1\_int\_1\ X3) \Rightarrow ((k6\_int\_1\ X1\ X3 = k6\_int\_1\ X2\ X3) \Rightarrow (k6\_int\_1\ (k1\_newton\ X1\ X0)\ X3 = k6\_int\_1\ (k1\_newton\ X2\ X0)\ X3))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1\ X0) \wedge (v1\_int\_1\ X1)) \Rightarrow (v1\_int\_1\ (k6\_int\_1\ X0\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (v1\_int\_1\ X0) \tag{4}$$

**Theorem 1**

$$\forall X0.(v1\_int\_1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (k6\_int\_1\ (k1\_newton\ X0\ X1)\ X2 = k6\_int\_1\ (k1\_newton\ (k6\_int\_1\ X0\ X2)\ X1)\ X2)))$$