

t32_nat_d (TMXe-
HGLiYxVKKEXzxsBg7TuUJnsmS3H3Jy3)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_nat_d : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_int_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v7_ordinal1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (r1_nat_d X0 X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v7_ordinal1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (k6_nat_d X0 X1 = k3_int_2 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow ((X2 = k3_int_2 X0 X1) \Leftrightarrow ((r1_nat_d X2 X0) \wedge ((r1_nat_d \\ & X2 X1) \wedge (\forall X3. (v7_ordinal1 X3) \Rightarrow ((r1_nat_d X3 X0) \wedge (r1_nat_d \\ & X3 X1)) \Rightarrow (r1_nat_d X3 X2)))))))) \quad (3) \end{aligned}$$

Theorem 1 $\forall X0. (v7_ordinal1 X0) \Rightarrow (k6_nat_d X0 X0 = X0)$.