

t1\_nat\_d  
(TMci9VV1xK2BnU7xBP3uC3JAn7rw9m75v8r)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k4\_nat\_d : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_int\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_nat\_d : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (k4\_nat\_d X0 X1 = k6\_int\_1 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (k2\_nat\_d X0 X1 = k6\_int\_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v7\_ordinal1 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (v7\_ordinal1 (k2\_nat\_d X0 X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7\_ordinal1 X0) \Rightarrow (\forall X1. (v7\_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7\_ordinal1 X2) \Rightarrow ((X2 = k2\_nat\_d X0 X1) \Leftrightarrow (\neg (\forall X3. (v7\_ordinal1 \\ & X3) \Rightarrow (\neg (X0 = k2\_xcmplx\_0 (k3\_xcmplx\_0 X1 X3) X2) \wedge (\neg r1\_xxreal\_0 \\ & X1 X2)))) \wedge (\neg (X2 = k6\_numbers) \wedge (X1 = k6\_numbers)))))) \end{aligned} \quad (4)$$

**Theorem 1**

$$\forall X0. (v7\_ordinal1 X0) \Rightarrow (\forall X1. (v7\_ordinal1 X1) \Rightarrow (\neg (\neg r1\_xxreal\_0 X0 k6\_numbers) \wedge (r1\_xxreal\_0 X0 (k4\_nat\_d X1 X0))))$$