

t65\_nat\_d (TMbswvyt-  
mJzdY7g65pnPqHDXcvyxWAcpZqE)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $k6\_int\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_int\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((k2\_xcmplx\_0 X0 X1 = k6\_numbers) \Rightarrow ((X0 = k6\_numbers) \wedge (X1 = k6\_numbers)))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow (((r1\_xxreal\_0 k6\_numbers X1) \Rightarrow ((r1\_xxreal\_0 X0 X1) \vee (k6\_int\_1 X1 X0 = X1))) \wedge ((r1\_xxreal\_0 (k4\_xcmplx\_0 X0) X1) \Rightarrow ((r1\_xxreal\_0 k6\_numbers X1) \vee (k6\_int\_1 X1 X0 = k2\_xcmplx\_0 X0 X1)))))) \quad (2)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow ((\neg r1\_xxreal\_0 X0 k6\_numbers) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow ((r1\_xxreal\_0 k6\_numbers (k6\_int\_1 X1 X0)) \wedge (\neg r1\_xxreal\_0 X0 (k6\_int\_1 X1 X0)))))) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (k6\_int\_1 X0 X0 = k6\_numbers) \quad (4)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (\neg (r1\_xxreal\_0 X0 X1) \wedge (\forall X2.(v7\_ordinal1 X2) \Rightarrow (X1 \neq k2\_xcmplx\_0 X0 X2)))) \quad (5)$$

Assume the following.

$$\exists X0.v7\_ordinal1 X0 \quad (6)$$

Assume the following.

$$\exists X0.v1\_int\_1 X0 \quad (7)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (v7\_ordinal1 (k6\_int\_1 X0 X1))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1 X0) \wedge (v1\_int\_1 X1)) \Rightarrow (v1\_int\_1 (k6\_int\_1 X0 X1)) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow (((X1 \neq k6\_numbers) \Rightarrow \\ (k6\_int\_1 X0 X1 = k6\_xcmplx\_0 X0 (k3\_xcmplx\_0 (k5\_int\_1 X0 X1) X1))) \wedge \\ ((X1 = k6\_numbers) \Rightarrow (k6\_int\_1 X0 X1 = k6\_numbers)))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_int\_1 X0) \quad (11)$$

**Theorem 1**

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