

t4\_int\_2

(TMY9zK1KPPegmv68y1kgnFgNp1VXykfrKTz)

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Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k2\_int\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_int\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $np\_0 : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\neg (k3\_xcmplx\_0 X0 X1 = k6\_numbers) \wedge ((X0 \neq k6\_numbers) \wedge (X1 \neq k6\_numbers)))))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow ((r1\_int\_1 k6\_numbers X0) \Leftrightarrow (X0 = k6\_numbers)) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow (\forall X2.(v1\_int\_1 X2) \Rightarrow ((r1\_int\_1 X0 X1) \Rightarrow (r1\_int\_1 X0 (k3\_xcmplx\_0 X1 X2)))))) \quad (4)$$

Assume the following.

$$m1\_subset\_1 k1\_xboole\_0 k4\_ordinal1 \quad (5)$$

Assume the following.

$$v1\_xboole\_0 np\_0 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1 X0) \wedge (v1\_int\_1 X1)) \Rightarrow (r1\_int\_1 X0 X0) \quad (7)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1 X0)\wedge(v1\_int\_1 X1))\Rightarrow(v1\_int\_1 (k3\_xcmplx\_0 X0 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1 X0)\wedge(v1\_int\_1 X1))\Rightarrow(v7\_ordinal1 (k2\_int\_2 X0 X1)) \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_int\_1 X0)\Rightarrow(\forall X1.(v1\_int\_1 X1)\Rightarrow(\forall X2. \\ & (v7\_ordinal1 X2)\Rightarrow((X2 = k2\_int\_2 X0 X1)\Leftrightarrow((r1\_int\_1 X0 X2)\wedge((r1\_int\_1 \\ & X1 X2)\wedge(\forall X3.(v1\_int\_1 X3)\Rightarrow(((r1\_int\_1 X0 X3)\wedge(r1\_int\_1 \\ & X1 X3))\Rightarrow(r1\_int\_1 X2 X3)))))))) \quad (11) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0)\wedge(v1\_xcmplx\_0 X1))\Rightarrow(k3\_xcmplx\_0 X0 X1 = k3\_xcmplx\_0 X1 X0) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1 X0)\wedge(v1\_int\_1 X1))\Rightarrow(k2\_int\_2 X0 X1 = k2\_int\_2 X1 X0) \quad (13)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow(v1\_xcmplx\_0 X0) \quad (15)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0)\Rightarrow(v1\_xreal\_0 X0) \quad (16)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0)\Rightarrow(v1\_int\_1 X0) \quad (17)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_int\_1 X0)\Rightarrow(\forall X1.(v1\_int\_1 X1)\Rightarrow(((X0 = k6\_numbers)\vee \\ & (X1 = k6\_numbers))\Leftrightarrow(k2\_int\_2 X0 X1 = k6\_numbers))) \end{aligned}$$