

## t71\_int\_1

(TMT81uTzwUZvKpNX5NQPwZwar9uWEJu1wTG)

October 27, 2020

Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_int\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k4\_int\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_0 : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k3\_int\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (((r1\_xxreal\_0 \\ (k3\_real\_1 (k1\_int\_1 X1) np\_1) X0) \wedge (r1\_xxreal\_0 X0 (k3\_real\_1 \\ X1 np\_1))) \Rightarrow (k1\_int\_1 X0 = k3\_real\_1 (k1\_int\_1 X1) np\_1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xreal\_0 X2) \Rightarrow ((r1\_xxreal\_0 X0 X1) \Leftrightarrow (r1\_xxreal\_0 (k2\_xcmplx\_0 \\ X0 X2) (k2\_xcmplx\_0 X1 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (k4\_int\_1 \\ (k2\_xcmplx\_0 X1 X0) = k4\_int\_1 X1)) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((k4\_int\_1 X0 = k6\_numbers) \Leftrightarrow (v1\_int\_1 X0)) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (X0 = k3\_real\_1 (k1\_int\_1 X0) (k4\_int\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow (k2\_xcmplx\_0 \\ (k1\_int\_1 X0) X1 = k1\_int\_1 (k2\_xcmplx\_0 X0 X1))) \quad (6)$$

Assume the following.

$$\begin{aligned} & ((v2\_xreal\_0 \ np\_1) \wedge (m2\_subset\_1 \ np\_1 \ k1\_numbers \ k5\_numbers)) \wedge \\ & ((m1\_subset\_1 \ np\_1 \ k5\_numbers) \wedge (m1\_subset\_1 \ np\_1 \ k1\_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$(m2\_subset\_1 \ np\_0 \ k1\_numbers \ k5\_numbers) \wedge ((m1\_subset\_1 \ np\_0 \ k5\_numbers) \wedge (m1\_subset\_1 \ np\_0 \ k1\_numbers)) \quad (8)$$

Assume the following.

$$\neg r1\_xreal\_0 \ np\_1 \ np\_0 \quad (9)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (10)$$

Assume the following.

$$\forall X0. (v1\_xreal\_0 \ X0) \Rightarrow (k4\_int\_1 \ X0 = k3\_int\_1 \ X0) \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xreal\_0 \ X0) \wedge (m1\_subset\_1 \ X1 \ k1\_numbers)) \Rightarrow (k3\_real\_1 \ X0 \ X1 = k2\_xcmplx\_0 \ X0 \ X1) \quad (12)$$

Assume the following.

$$\forall X0. (v1\_xreal\_0 \ X0) \Rightarrow (k1\_int\_1 \ (k1\_int\_1 \ X0) = k1\_int\_1 \ X0) \quad (13)$$

Assume the following.

$$\forall X0. (m2\_subset\_1 \ X0 \ k1\_numbers \ k5\_numbers) \Rightarrow ((\neg r1\_xreal\_0 \ np\_1 \ X0) \Rightarrow (X0 = k6\_numbers)) \quad (14)$$

Assume the following.

$$\forall X0. (v1\_xreal\_0 \ X0) \Rightarrow (v1\_xreal\_0 \ (k3\_int\_1 \ X0)) \quad (15)$$

Assume the following.

$$\forall X0. (v1\_xreal\_0 \ X0) \Rightarrow (m1\_subset\_1 \ (k4\_int\_1 \ X0) \ k1\_numbers) \quad (16)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xreal\_0 \ X0) \wedge (m1\_subset\_1 \ X1 \ k1\_numbers)) \Rightarrow (m1\_subset\_1 \ (k3\_real\_1 \ X0 \ X1) \ k1\_numbers) \quad (17)$$

Assume the following.

$$\forall X0. (v1\_xreal\_0 \ X0) \Rightarrow (v1\_int\_1 \ (k1\_int\_1 \ X0)) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0 X0)\wedge(v1\_xxreal\_0 X1))\Rightarrow( (r1\_xxreal\_0 X0 X1)\vee(r1\_xxreal\_0 X1 X0)) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0)\wedge(m1\_subset\_1 X1 k1\_numbers))\Rightarrow (k3\_real\_1 X0 X1 = k3\_real\_1 X1 X0) \quad (20)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (21)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow(v1\_xxreal\_0 X0) \quad (22)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0)\Rightarrow(v1\_xreal\_0 X0) \quad (23)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0)\Rightarrow(v1\_int\_1 X0) \quad (24)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers)\Rightarrow(v1\_xreal\_0 X0) \quad (25)$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow(\forall X1.(v1\_xreal\_0 X1)\Rightarrow(\neg(r1\_xxreal\_0 (k3\_real\_1 (k1\_int\_1 X1) np\_1) X0)\wedge(\neg r1\_xxreal\_0 (k3\_real\_1 X1 np\_1) X0)\wedge(r1\_xxreal\_0 (k4\_int\_1 X1) (k4\_int\_1 X0))))))$$