# t105_xxreal_3 (TMafUXBw2Z8gxwzud7av1sXN7FRWNZbYJWM)

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Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $k1\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k4\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_xcmplx\_0 : \iota \Rightarrow \iota$ 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 $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k5\_xxreal\_3 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (k4\_xxreal\_3\ np\_\_2\ X0 = k1\_xxreal\_3\ X0\ X0) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (k4\_xxreal\_3\ np\_\_1\ X0 = X0) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xxreal\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xxreal\_0\ X2) \Rightarrow (k4\_xxreal\_3\ X0\ (k4\_xxreal\_3\ X1\ X2) = k4\_xxreal\_3\ (k4\_xxreal\_3\ X0\ X1)\ X2))) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k7\_xcmplx\_0\ np\_\_1\ X0 = k5\_xcmplx\_0\ X0) \tag{4}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{5}$$

Assume the following.

$$k7\_xcmplx\_0\ np\_\_2\ np\_\_2 = np\_\_1 \tag{6}$$

Assume the following.

$$k7\_xcmplx\_0\ np\_\_1\ (k7\_xcmplx\_0\ np\_\_1\ np\_\_2) = np\_\_2 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_xreal\_0\ X0)\wedge ((v1\_xreal\_0\ X1)\wedge((v1\_xcmplx\_0\ X2)\wedge(v1\_xcmplx\_0\ X3))))\Rightarrow(((X0 = X2)\wedge(X1 = X3))\Rightarrow(k6\_xxreal\_3\ X0\ X1 = k7\_xcmplx\_0\ X2\ X3)) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow((X0 = X1)\Rightarrow(k5\_xxreal\_3\ X0 = k5\_xcmplx\_0\ X1)) \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow((v1\_xcmplx\_0\ (k5\_xcmplx\_0\ X0))\wedge(v1\_xreal\_0\ (k5\_xcmplx\_0\ X0))) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow((v1\_xxreal\_0\ (k5\_xxreal\_3\ X0))\wedge(v1\_xreal\_0\ (k5\_xxreal\_3\ X0))) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(v1\_xxreal\_0\ (k6\_xxreal\_3\ X0\ X1)) \tag{12}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0)\Rightarrow(v1\_xxreal\_0\ (k5\_xxreal\_3\ X0)) \tag{13}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xxreal\_0\ X1)\Rightarrow(k6\_xxreal\_3\ X0\ X1 = k4\_xxreal\_3\ X0\ (k5\_xxreal\_3\ X1))) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(k4\_xxreal\_3\ X0\ X1 = k4\_xxreal\_3\ X1\ X0) \tag{15}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{16}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{17}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{18}$$

**Theorem 1**

$$\forall X0.(v1\_xxreal\_0\ X0)\Rightarrow(k1\_xxreal\_3\ (k6\_xxreal\_3\ X0\ np\_\_2)\ (k6\_xxreal\_3\ X0\ np\_\_2) = X0)$$