

t64\_int\_1

(TMF2V4eVrye4WpP811pqFwoapzDDWu93VY)

October 27, 2020

Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_int\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((k1\_int\_1 X0 = X0) \Leftrightarrow (v1\_int\_1 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k4\_xcmplx\_0 (k7\_xcmplx\_0 X0 X1) = k7\_xcmplx\_0 (k4\_xcmplx\_0 X0) X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow ((v1\_xcmplx\_0 (k4\_xcmplx\_0 X0)) \wedge (v1\_int\_1 (k4\_xcmplx\_0 X0))) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xcmplx\_0 X0) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (v1\_xreal\_0 X0) \quad (5)$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((v1\_int\_1 (k7\_xcmplx\_0 X0 X1)) \Rightarrow (k4\_xcmplx\_0 (k1\_int\_1 (k7\_xcmplx\_0 X0 X1)) = k1\_int\_1 (k7\_xcmplx\_0 (k4\_xcmplx\_0 X0) X1))))$$