

## l7\_int\_2

(TMVd4mjE4izUqHFyK1MJKW48Yi8XLFyVvgH)

October 27, 2020

Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $r1\_int\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow (\forall X2.(v1\_int\_1 X2) \Rightarrow (((r1\_int\_1 X0 X1) \wedge (r1\_int\_1 X1 X2)) \Rightarrow (r1\_int\_1 X0 X2)))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow ((r1\_int\_1 X0 (k4\_xcmplx\_0 X0)) \wedge (r1\_int\_1 (k4\_xcmplx\_0 X0) X0)) \quad (2)$$

Assume the following.

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

**Theorem 1**

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow ((r1\_int\_1 X0 X1) \Leftrightarrow (r1\_int\_1 (k4\_xcmplx\_0 X0) X1)))$$