

l8\_series\_5 (TM-  
cURvD3SBr2nYSGSUNMx4eLgb5aHrzQuCB)

October 27, 2020

Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k3\_square\_1 : \iota \Rightarrow \iota$  be given. Let  $k18\_complex1 : \iota \Rightarrow \iota$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  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. Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((\neg r1\_xxreal\_0 np\_1 (k3\_square\_1 X0)) \Rightarrow ((\neg r1\_xxreal\_0 X0 (k4\_xcmplx\_0 np\_1)) \wedge (\neg r1\_xxreal\_0 np\_1 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (((\neg r1\_xxreal\_0 X1 (k4\_xcmplx\_0 X0)) \wedge (\neg r1\_xxreal\_0 X0 X1)) \Leftrightarrow (\neg r1\_xxreal\_0 X0 (k18\_complex1 X1)))) \quad (2)$$

Assume the following.

$$((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \quad (3)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (4)$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\neg (\neg r1\_xxreal\_0 np\_1 (k3\_square\_1 X0)) \wedge (r1\_xxreal\_0 np\_1 (k18\_complex1 X0)))$$