

# t1\_extreal1 (TMGsoFeeE- BgHvb12eYN5gQthEasBCe3yXMK)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_numbers : \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k1\_extreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1 X0 k7\_numbers) \wedge (m1\_subset\_1 X1 k7\_numbers)) \Rightarrow (k1\_extreal1 X0 X1 = k4\_xxreal\_3 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (k11\_binop\_2 X0 X1 = k3\_xcmplx\_0 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v1\_xreal\_0 X0) \wedge ((v1\_xreal\_0 X1) \wedge ((v1\_xcmplx\_0 X2) \wedge (v1\_xcmplx\_0 X3)))) \Rightarrow (((X0 = X2) \wedge (X1 = X3)) \Rightarrow (k4\_xxreal\_3 X0 X1 = k3\_xcmplx\_0 X2 X3)) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (5)$$

## Theorem 1

$$\forall X0. (m1\_subset\_1 X0 k7\_numbers) \Rightarrow (\forall X1. (m1\_subset\_1 X1 k7\_numbers) \Rightarrow (\forall X2. (m1\_subset\_1 X2 k1\_numbers) \Rightarrow (\forall X3. (m1\_subset\_1 X3 k1\_numbers) \Rightarrow (((X0 = X2) \wedge (X1 = X3)) \Rightarrow (k1\_extreal1 X0 X1 = k11\_binop\_2 X2 X3))))))$$