

t58\_xxreal\_3

(TMPgHi4kVWx3ahAZetwD1JJ75NUzqWRpvoy)

October 27, 2020

Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xxreal\_0 : \iota$  be given. Let  $k2\_xxreal\_0 : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((r1\_xxreal\_0 k1\_xxreal\_0 X0) \Rightarrow (X0 = k1\_xxreal\_0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((X0 \neq k2\_xxreal\_0) \Rightarrow ((k3\_xxreal\_3 k2\_xxreal\_0 X0 = k2\_xxreal\_0) \wedge (k3\_xxreal\_3 X0 k2\_xxreal\_0 = k1\_xxreal\_0))) \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow (\neg(\neg(X0 = k1\_xxreal\_0) \wedge (X1 = k1\_xxreal\_0)) \wedge \\ & (\neg(X0 = k2\_xxreal\_0) \wedge (X1 = k2\_xxreal\_0)) \wedge (\neg(X1 = k1\_xxreal\_0) \wedge \\ & (X2 = k2\_xxreal\_0)) \wedge (\neg(X1 = k2\_xxreal\_0) \wedge (X2 = k1\_xxreal\_0)) \wedge \\ & ((r1\_xxreal\_0 (k3\_xxreal\_3 X0 X1) X2) \wedge (X1 = k2\_xxreal\_0)))))) \end{aligned}$$