

## l21\_ndiff\_5

(TMLB4UYKZ3ZHP5rYQ1esWW8HNh4vv1Dg2wm)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k4\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_urysohn1 : \iota$  be given. Let  $k3\_limfunc1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k9\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow ((\neg r1\_xxreal\_0 X0 k6\_numbers) \Rightarrow \\
 & (\forall X1.(m1\_subset\_1 X1 k1\_numbers) \Rightarrow (\neg(\neg r1\_xxreal\_0 X1 k6\_numbers) \wedge \\
 & (\forall X2.(m1\_subset\_1 X2 k1\_numbers) \Rightarrow (\forall X3.(m1\_subset\_1 \\
 & X3 k1\_numbers) \Rightarrow (\neg(X2 \in k4\_subset\_1 k1\_numbers k2\_urysohn1 (k3\_limfunc1 \\
 & np\_1)) \wedge ((X3 \in k4\_subset\_1 k1\_numbers k2\_urysohn1 (k3\_limfunc1 \\
 & np\_1)) \wedge ((\neg r1\_xxreal\_0 X2 k6\_numbers) \wedge ((\neg r1\_xxreal\_0 X1 X2) \wedge \\
 & ((\neg r1\_xxreal\_0 X3 X1) \wedge (\neg r1\_xxreal\_0 X0 (k9\_real\_1 X3 X2))))))))))))) \\
 & \tag{1}
 \end{aligned}$$

**Theorem 1**

$$\begin{aligned}
 & \forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow ((\forall X1.(m1\_subset\_1 \\
 & X1 k1\_numbers) \Rightarrow ((\neg r1\_xxreal\_0 X1 k6\_numbers) \Rightarrow (r1\_xxreal\_0 X0 \\
 & X1))) \Rightarrow (r1\_xxreal\_0 X0 k6\_numbers))
 \end{aligned}$$