

t1\_yellow11

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Let  $np\_3 : \iota$  be given. Let  $k8\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v2\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$np\_3 = k1\_enumset1\ k1\_xboole\_0\ np\_1\ np\_2 \quad (1)$$

Assume the following.

$$m1\_subset\_1\ k1\_xboole\_0\ k4\_ordinal1 \quad (2)$$

Assume the following.

$$\begin{aligned} & ((v2\_xreal\_0\ np\_2) \wedge (m2\_subset\_1\ np\_2\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_2\ k1\_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2\_xreal\_0\ np\_1) \wedge (m2\_subset\_1\ np\_1\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_1\ k1\_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0\ X0) \wedge \\ & ((m1\_subset\_1\ X1\ X0) \wedge ((m1\_subset\_1\ X2\ X0) \wedge (m1\_subset\_1\ X3\ X0)))) \Rightarrow \\ & (k8\_domain\_1\ X0\ X1\ X2\ X3 = k1\_enumset1\ X1\ X2\ X3) \end{aligned} \quad (5)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (6)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (7)$$

Assume the following.

$$(\neg v1\_xboole\_0 \ k4\_ordinal1) \wedge (v3\_ordinal1 \ k4\_ordinal1) \quad (8)$$

**Theorem 1**  $np\_3 = k8\_domain\_1 \ k5\_numbers \ k6\_numbers \ np\_1 \ np\_2$ .