t4_ramsey_1 (TMPq9dxvZECQBsiYxpVjLD1U9uWHBTX2eYz)

October 27, 2020

Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\neg(\neg v1\_finset\_1\ X0) \wedge (v1\_finset\_1\ (k2\_xboole\_0\ X0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ (k4\_xboole\_0\ X1\ X0) = k2\_xboole\_0\ X0\ X1 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1\ X0\ X1 = k4\_xboole\_0\ X0\ X1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_finset\_1\ X0) \wedge (v1\_finset\_1\ X1)) \Rightarrow (v1\_finset\_1\ (k2\_xboole\_0\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{5}$$

Theorem 1

$$\forall X0.\forall X1.\neg(\neg v1\_finset\_1\ X0) \wedge ((v1\_finset\_1\ X1) \wedge (v1\_finset\_1\ (k6\_subset\_1\ X0\ X1)))$$