t29_binari_4 (TMWU1JuX8XCV9AEEXwjR2ReL1TFWGgfPuhk)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $r2\_int\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_series\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k2\_binari\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_int\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $v6\_membered : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $v5\_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_int\_1\ X0) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (\forall X2.\ (v1\_int\_1\ X2) \Rightarrow (((k6\_int\_1\ X1\ X0 = k6\_int\_1\ X2\ X0) \Rightarrow ((X0 = k6\_numbers) \vee (r2\_int\_1\ X1\ X2\ X0))) \wedge ((r2\_int\_1\ X1\ X2\ X0) \Rightarrow (k6\_int\_1\ X1\ X0 = k6\_int\_1\ X2\ X0))))) \tag{1}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{3}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{4}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(v7\_ordinal1\ X0))\Rightarrow(\forall X1.\ (v1\_int\_1\ X1)\Rightarrow(\forall X2.(v1\_int\_1\ X2)\Rightarrow((k6\_int\_1\ X1\ (k5\_series\_1\ np\_\_2\ X0) = k6\_int\_1\ X2\ (k5\_series\_1\ np\_\_2\ X0))\Rightarrow((r1\_xxreal\_0\ k6\_numbers\ X1)\vee((r1\_xxreal\_0\ k6\_numbers\ X2)\vee(k2\_binari\_4\ X0\ X1 = k2\_binari\_4\ X0\ X2))))))) \tag{5}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(v7\_ordinal1\ X0))\Rightarrow(\forall X1.\ (v1\_int\_1\ X1)\Rightarrow(\forall X2.(v1\_int\_1\ X2)\Rightarrow(((r1\_xxreal\_0\ k6\_numbers\ X1)\wedge((r1\_xxreal\_0\ k6\_numbers\ X2)\wedge(k6\_int\_1\ X1\ (k5\_series\_1\ np\_\_2\ X0) = k6\_int\_1\ X2\ (k5\_series\_1\ np\_\_2\ X0))))\Rightarrow(k2\_binari\_4\ X0\ X1 = k2\_binari\_4\ X0\ X2)))) \tag{6}$$

Assume the following.

$$\neg v1\_finset\_1\ k4\_ordinal1 \tag{7}$$

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{8}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_numbers \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(v7\_ordinal1\ X1))\Rightarrow(\ m2\_subset\_1\ (k5\_series\_1\ X0\ X1)\ k1\_numbers\ k5\_numbers) \tag{10}$$

Assume the following.

$$m1\_subset\_1\ k5\_numbers\ (k1\_zfmisc\_1\ k1\_numbers) \tag{11}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finset\_1\ X0))) \tag{12}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(v1\_relat\_1\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(v5\_membered\ X0) \tag{14}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(v1\_funct\_1\ X0) \tag{15}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v1\_xboole\_0\ X0))\Rightarrow((v1\_relat\_1\ X0)\wedge(v1\_finseq\_1\ X0)) \tag{16}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v7\_ordinal1\ X1)) \tag{17}$$

Assume the following.

$$\forall X0.(v5\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v1\_int\_1\ X1)) \tag{18}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(v7\_ordinal1\ X0))\Rightarrow(\forall X1.(v1\_int\_1\ X1)\Rightarrow(\forall X2.(v1\_int\_1\ X2)\Rightarrow((r2\_int\_1\ X1\ X2\ (k5\_series\_1\ np\_\_2\ X0))\Rightarrow(((\neg(r1\_xxreal\_0\ k6\_numbers\ X1)\wedge(r1\_xxreal\_0\ k6\_numbers\ X2))\wedge(\neg(\neg r1\_xxreal\_0\ k6\_numbers\ X1)\wedge(\neg r1\_xxreal\_0\ k6\_numbers\ X2)))\vee(k2\_binari\_4\ X0\ X1 = k2\_binari\_4\ X0\ X2)))))$$