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Let $v6\_valued\_0 : \iota \Rightarrow o$ be given. Let $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $k16\_sin\_cos : \iota$ be given. Let $k2\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32\_sin\_cos : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $v3\_rcomp\_1 : \iota \Rightarrow o$ be given. Let $r2\_fdiff\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_fdiff\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19\_sin\_cos : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ 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 $k5\_numbers : \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (v3\_rcomp\_1\ (k2\_rcomp\_1\ X0\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow ((r2\_fdiff\_1\ k16\_sin\_cos\ k1\_numbers) \wedge (k1\_fdiff\_1\ k16\_sin\_cos\ X0 = k1\_seq\_1\ k19\_sin\_cos\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ X1)) \Leftrightarrow (r1\_tarski\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v3\_rcomp\_1\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ k1\_numbers))) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers)))) \Rightarrow (((r2\_fdiff\_1\ X2\ X0) \wedge (r1\_tarski\ X1\ X0)) \Rightarrow (r2\_fdiff\_1\ X2\ X1))) \tag{4}$$

Assume the following.

$$(k1\_relset\_1\ k1\_numbers\ k16\_sin\_cos = k1\_numbers) \wedge (k1\_relset\_1\ k1\_numbers\ k19\_sin\_cos = k1\_numbers) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\neg(X0 \in k2\_rcomp\_1\ (k10\_real\_1\ k32\_sin\_cos\ np\_\_2)\ (k8\_real\_1\ (k10\_real\_1\ np\_\_3\ np\_\_2)\ k32\_sin\_cos)) \wedge (r1\_xxreal\_0\ k6\_numbers\ (k1\_seq\_1\ k19\_sin\_cos\ X0))) \tag{6}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers)))) \Rightarrow (((r1\_tarski\ (k2\_rcomp\_1\ X0\ X1)\ (k1\_relset\_1\ k1\_numbers\ X2)) \wedge ((r2\_fdiff\_1\ X2\ (k2\_rcomp\_1\ X0\ X1)) \wedge (\forall X3.(m1\_subset\_1\ X3\ k1\_numbers) \Rightarrow (\neg(X3 \in k2\_rcomp\_1\ X0\ X1) \wedge (r1\_xxreal\_0\ k6\_numbers\ (k1\_fdiff\_1\ X2\ X3)))))) \Rightarrow (v6\_valued\_0\ (k2\_partfun1\ k1\_numbers\ k1\_numbers\ X2\ (k2\_rcomp\_1\ X0\ X1)))))) \tag{7}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_3) \wedge (m2\_subset\_1\ np\_\_3\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_3\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_3\ k1\_numbers)) \tag{8}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (m1\_subset\_1\ (k8\_real\_1\ X0\ X1)\ k1\_numbers) \tag{10}$$

Assume the following.

$$m1\_subset\_1\ k32\_sin\_cos\ k1\_numbers \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0) \wedge (v1\_xxreal\_0\ X1)) \Rightarrow (m1\_subset\_1\ (k2\_rcomp\_1\ X0\ X1)\ (k1\_zfmisc\_1\ k1\_numbers)) \tag{12}$$

Assume the following.

$$(v1\_funct\_1\ k16\_sin\_cos) \wedge ((v1\_funct\_2\ k16\_sin\_cos\ k1\_numbers\ k1\_numbers) \wedge (m1\_subset\_1\ k16\_sin\_cos\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers)))) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers)\wedge(v1\_xreal\_0\ X1))\Rightarrow(m1\_subset\_1\ (k10\_real\_1\ X0\ X1)\ k1\_numbers) \tag{14}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \tag{15}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{16}$$

Theorem 1

$$v6\_valued\_0\ (k2\_partfun1\ k1\_numbers\ k1\_numbers\ k16\_sin\_cos\ (k2\_rcomp\_1\ (k10\_real\_1\ k32\_sin\_cos\ np\_\_2)\ (k8\_real\_1\ (k10\_real\_1\ np\_\_3\ np\_\_2)\ k32\_sin\_cos)))$$