t61_comput_1 (TMFzzWQqF-BqhET67HTH5UVwcmTVZix6E6ne)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v4\_valued\_0 : \iota \Rightarrow o$ be given. Let $v2\_margrel1 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19\_margrel1 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k8\_comput\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_comput\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_recdef\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let

$k2\_finseq\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k5\_numbers) \Rightarrow (\forall X2.((\neg v1\_xboole\_0\ X2) \wedge ((v1\_relat\_1\ X2) \wedge ((v4\_relat\_1\ X2\ (k3\_finseq\_2\ k5\_numbers)) \wedge ((v1\_funct\_1\ X2) \wedge ((v4\_valued\_0\ X2) \wedge (v2\_margrel1\ X2)))))) \Rightarrow (\forall X3.((\neg v1\_xboole\_0\ X3) \wedge ((v1\_relat\_1\ X3) \wedge ((v4\_relat\_1\ X3\ (k3\_finseq\_2\ k5\_numbers)) \wedge ((v1\_funct\_1\ X3) \wedge ((v4\_valued\_0\ X3) \wedge (v2\_margrel1\ X3)))))) \Rightarrow (\forall X4.(m2\_finseq\_2\ X4\ k5\_numbers\ (k4\_finseq\_2\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ k5\_numbers)) \Rightarrow ((X0 \in k4\_finseq\_1\ X4) \Rightarrow (((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ k6\_numbers \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0)) \Rightarrow (k2\_finseq\_3\ X0\ X4 \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ X2)) \wedge (((k2\_finseq\_3\ X0\ X4 \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ X2) \Rightarrow (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ k6\_numbers \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0))) \wedge (((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ k6\_numbers \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0)) \Rightarrow (k1\_recdef\_1\ (k7\_comput\_1\ X2\ X3\ X0)\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ k6\_numbers) = k1\_recdef\_1\ X2\ (k2\_finseq\_3\ X0\ X4))) \wedge (((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ (k2\_nat\_1\ X1\ np\_\_1) \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0)) \Rightarrow ((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1 \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0)) \wedge (k8\_finseq\_1\ k5\_numbers\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1)\ (k12\_finseq\_1\ k5\_numbers\ (k1\_recdef\_1\ (k7\_comput\_1\ X2\ X3\ X0)\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1))) \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ X3))) \wedge ((((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1 \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0)) \wedge (k8\_finseq\_1\ k5\_numbers\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1)\ (k12\_finseq\_1\ k5\_numbers\ (k1\_recdef\_1\ (k7\_comput\_1\ X2\ X3\ X0)\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1))) \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ X3)) \Rightarrow (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ (k2\_nat\_1\ X1\ np\_\_1) \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0))) \wedge ((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ (k2\_nat\_1\ X1\ np\_\_1) \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0)) \Rightarrow (k1\_recdef\_1\ (k7\_comput\_1\ X2\ X3\ X0)\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ (k2\_nat\_1\ X1\ np\_\_1)) = k1\_recdef\_1\ X3\ (k8\_finseq\_1\ k5\_numbers\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1)\ (k12\_finseq\_1\ k5\_numbers\ (k1\_recdef\_1\ (k7\_comput\_1\ X2\ X3\ X0)\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1))))))))))))))) \tag{1}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow(\forall X2.((\neg v1\_xboole\_0\ X2)\wedge((v1\_relat\_1\ X2)\wedge((v4\_relat\_1\ X2\ (k3\_finseq\_2\ k5\_numbers))\wedge((v1\_funct\_1\ X2)\wedge((v4\_valued\_0\ X2)\wedge(v2\_margrel1\ X2))))))\Rightarrow(\forall X3.((\neg v1\_xboole\_0\ X3)\wedge((v1\_relat\_1\ X3)\wedge((v4\_relat\_1\ X3\ (k3\_finseq\_2\ k5\_numbers))\wedge((v1\_funct\_1\ X3)\wedge((v4\_valued\_0\ X3)\wedge(v2\_margrel1\ X3))))))\Rightarrow(\forall X4.(m2\_finseq\_2\ X4\ k5\_numbers\ (k4\_finseq\_2\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ k5\_numbers))\Rightarrow((X0 \in k4\_finseq\_1\ X4)\Rightarrow((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ (k2\_nat\_1\ X1\ np\_\_1) \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0))\Leftrightarrow((k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1 \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ (k7\_comput\_1\ X2\ X3\ X0))\wedge(k8\_finseq\_1\ k5\_numbers\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1)\ (k12\_finseq\_1\ k5\_numbers\ (k1\_recdef\_1\ (k7\_comput\_1\ X2\ X3\ X0)\ (k8\_comput\_1\ (k2\_nat\_1\ (k19\_margrel1\ X2)\ np\_\_1)\ X4\ X0\ X1))) \in k1\_relset\_1\ (k3\_finseq\_2\ k5\_numbers)\ X3))))))))$$