l11_integr16 (TMVBKshq9T9pAdsE2vBiZSzQx21mkr7jFgu)

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Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17\_rvsum\_1 : \iota \Rightarrow \iota$ 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 $k3\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_finsop\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k27\_binop\_2 : \iota$ be given. Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ k2\_numbers) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ k2\_numbers) \Rightarrow (k17\_rvsum\_1\ (k8\_finseq\_1\ k2\_numbers\ X0\ X1) = k3\_binop\_2\ (k17\_rvsum\_1\ X0)\ (k17\_rvsum\_1\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ (k2\_zfmisc\_1\ X0\ X0)\ X0) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0))))) \Rightarrow (k1\_finsop\_1\ X0\ (k12\_finseq\_1\ X0\ X1)\ X2 = X1))) \tag{2}$$

Assume the following.

$$\neg v1\_xboole\_0\ k2\_numbers \tag{3}$$

Assume the following.

$$(v1\_funct\_1\ k27\_binop\_2) \wedge ((v1\_funct\_2\ k27\_binop\_2\ (k2\_zfmisc\_1\ k2\_numbers\ k2\_numbers)\ k2\_numbers) \wedge (m1\_subset\_1\ k27\_binop\_2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ k2\_numbers\ k2\_numbers)\ k2\_numbers)))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ X0)) \Rightarrow (m2\_finseq\_1\ (k12\_finseq\_1\ X0\ X1)\ X0) \tag{5}$$

Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ k2\_numbers) \Rightarrow (k17\_rvsum\_1\ X0 = k1\_finsop\_1\ k2\_numbers\ X0\ k27\_binop\_2) \tag{6}$$

Theorem 1

$$\forall X0.(m2\_finseq\_1\ X0\ k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k2\_numbers) \Rightarrow (k17\_rvsum\_1\ (k8\_finseq\_1\ k2\_numbers\ X0\ (k12\_finseq\_1\ k2\_numbers\ X1)) = k3\_binop\_2\ (k17\_rvsum\_1\ X0)\ X1))$$