

## t50\_rvsum\_2

(TMQwwjrS8Vr35TUoEDwjh1vLUjReT1NFb4M)

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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  $v1\_valued\_0 : \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k5\_rvsum\_2 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k30\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow \\ ((k9\_xtuple\_0 (k30\_valued\_1 X0) = k9\_xtuple\_0 X0) \wedge (\forall X1. \\ k1\_funct\_1 (k30\_valued\_1 X0) X1 = k4\_xcmplx\_0 (k1\_funct\_1 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow (k1\_card\_1 X0 = k1\_card\_1 (k9\_xtuple\_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge ((v1\_finseq\_1 X0) \wedge (v1\_valued\_0 X0)))) \Rightarrow (k5\_rvsum\_2 X0 = k30\_valued\_1 X0) \quad (3)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow (k3\_finseq\_1 X0 = k1\_card\_1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge ((v1\_valued\_0 X0) \wedge (v1\_finseq\_1 X0)))) \Rightarrow ((v1\_relat\_1 (k30\_valued\_1 X0)) \wedge (( \\ v1\_funct\_1 (k30\_valued\_1 X0)) \wedge ((v1\_valued\_0 (k30\_valued\_1 X0)) \wedge \\ (v1\_finseq\_1 (k30\_valued\_1 X0)))))) \end{aligned} \quad (5)$$

**Theorem 1**

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge ((v1\_finseq\_1 X0) \wedge (v1\_valued\_0 X0)))) \Rightarrow (k3\_finseq\_1 (k5\_rvsum\_2 X0) = k3\_finseq\_1 X0)$$