

t18_rfunct_3

(TMYYTdV9vEbEfHWkb8YDd1S2D8Bfj51mJwmJ)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_setwiseo : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13_rfunct_3 : \iota \Rightarrow \iota$ be given. Let $k3_rfunct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k4_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_rfunct_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_subset_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r3_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow & (k4_binop_1 (k3_rfunct_3 X0 k1_numbers) \\ & (k13_rfunct_3 X0) = k4_rfunct_3 X0 k1_numbers (k2_subset_1 X0) \quad (1) \\ & k6_numbers) \end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow & (r3_binop_1 (k3_rfunct_3 X0 k1_numbers) \\ & (k4_rfunct_3 X0 k1_numbers (k2_subset_1 X0) k6_numbers) (k13_rfunct_3 \\ & X0)) \quad (2) \end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow & (\forall X1. ((v1_funct_1 X1) \wedge \\ & (v1_funct_2 X1 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) X0)))) \Rightarrow ((v1_setwiseo X1 X0) \Leftrightarrow \\ & (r3_binop_1 X0 (k4_binop_1 X0 X1) X1))) \quad (3) \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. k3_rfunct_3 X0 X1 = k4_partfun1 X0 X1 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \neg v1_xboole_0 (k4_partfun1 X0 X1) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow & ((v1_funct_1 (k13_rfunct_3 X0)) \wedge \\ & ((v1_funct_2 (k13_rfunct_3 X0) (k2_zfmisc_1 (k3_rfunct_3 X0 k1_numbers) \\ & (k3_rfunct_3 X0 k1_numbers)) (k3_rfunct_3 X0 k1_numbers)) \wedge (m1_subset_1 \\ & (k13_rfunct_3 X0) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 (k3_rfunct_3 \\ & X0 k1_numbers) (k3_rfunct_3 X0 k1_numbers)) (k3_rfunct_3 X0 k1_numbers)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. k2_subset_1 X0 = X0 \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow & (v1_setwiseo (k13_rfunct_3 X0) \\ & (k3_rfunct_3 X0 k1_numbers)) \end{aligned}$$