

t35_rfunct_1

(TMSHW5FUprRMZxW2A1UxCpsVXEowqxY3gXGb)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k4_rfunct_1 : \iota \Rightarrow \iota$ be given. Let $k1_rfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k18_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_valued_0 \\ X1)))) \Rightarrow (k1_rfunct_1 X0 X1 = k18_valued_1 X0 (k4_rfunct_1 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_valued_0 \\ X1)))) \Rightarrow (k4_rfunct_1 (k18_valued_1 X0 X1) = k18_valued_1 (k4_rfunct_1 \\ X0) (k4_rfunct_1 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ (k4_rfunct_1 (k4_rfunct_1 X0) = k5_relat_1 X0 (k9_xtuple_0 (k4_rfunct_1 \\ X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ ((v1_relat_1 (k4_rfunct_1 X0)) \wedge ((v1_funct_1 (k4_rfunct_1 X0)) \wedge \\ (v1_valued_0 (k4_rfunct_1 X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1.(((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 \\ X0))) \wedge ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_valued_0 X1)))) \Rightarrow \\ (k18_valued_1 X0 X1 = k18_valued_1 X1 X0) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_valued_0 \\ X1))) \Rightarrow (k4_funct_1 (k1_funct_1 X0 X1) = k1_funct_1 (k5_relat_1 \\ X1 (k9_xtuple_0 (k4_funct_1 X1))) X0)) \end{aligned}$$