

t114_funct_4 (TMbePZ-
vaetK5jXaVHwhZYvfTvwzoQKWbcoF)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. k4_funct_4 X0 X0 X1 X2 = k16_funcop_1 X0 X2 \quad (1)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (k1_funct_4 (k1_funct_4 X0 X1) X2 = k1_funct_4 X0 (k1_funct_4 X1 X2)))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 (k16_funcop_1 X0 X1)) \wedge (v1_funct_1 (k16_funcop_1 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. k4_funct_4 X0 X1 X2 X3 = k1_funct_4 (k16_funcop_1 X0 X2) (k16_funcop_1 X1 X3) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (\forall X3. k1_funct_4 (k1_funct_4 X2 (k16_funcop_1 X3 X0)) (k16_funcop_1 X3 X1) = k1_funct_4 X2 (k16_funcop_1 X3 X1))$$