

t134_funct_7 (TM- Rbnj7HLM1zMjLpgyDBUYdDxrkF'bfEUBwf)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_tarski X0 (k2_xboole_0 X1 X2)) \Rightarrow (r1_tarski (k4_xboole_0 X0 X1) X2) \quad (1)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (v1_relat_1 X1) \Rightarrow (\forall X2. \forall X3. ((r1_tarski X2 X3) \wedge (k5_relat_1 X0 X3 = k5_relat_1 X1 X3)) \Rightarrow (k5_relat_1 X0 X2 = k5_relat_1 X1 X2))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. (r1_funct_7 X0 X1 X2) \Leftrightarrow (k5_relat_1 X0 (k6_subset_1 (k9_xtuple_0 X0) X2) = k5_relat_1 X1 (k6_subset_1 (k9_xtuple_0 X1) X2)))) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (\forall X3. ((v1_relat_1 X3) \wedge (v1_funct_1 X3)) \Rightarrow (((k9_xtuple_0 X2 = k9_xtuple_0 X3) \wedge ((r1_tarski (k9_xtuple_0 X2) (k2_xboole_0 X0 X1)) \wedge (k5_relat_1 X2 X1 = k5_relat_1 X3 X1))) \Rightarrow (r1_funct_7 X2 X3 X0)))$$