t36_rfunct_1 (TMRxcnZsMVh-SJLGb6o5uYNsHzYRn6zzsBRf)

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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 $k18\_valued\_1 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $k1\_rfunct\_1 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $k4\_rfunct\_1 : \iota{\Rightarrow}\iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\Rightarrow$$
$$(\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_valued\_0$$
$$X1)))\Rightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_valued\_0 \quad (1)$$
$$X2)))\Rightarrow(k18\_valued\_1\ (k18\_valued\_1\ X0\ X1)\ X2 = k18\_valued\_1\ X0\ ($$
$$k18\_valued\_1\ X1\ X2))))$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\Rightarrow$$
$$(\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_valued\_0 \quad (2)$$
$$X1)))\Rightarrow(k1\_rfunct\_1\ X0\ X1 = k18\_valued\_1\ X0\ (k4\_rfunct\_1\ X1)))$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\Rightarrow$$
$$((v1\_relat\_1\ (k4\_rfunct\_1\ X0))\wedge((v1\_funct\_1\ (k4\_rfunct\_1\ X0))\wedge \quad (3)$$
$$(v1\_valued\_0\ (k4\_rfunct\_1\ X0))))$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0$$
$$X0)))\wedge((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_valued\_0\ X1)))) \Rightarrow$$
$$((v1\_relat\_1\ (k18\_valued\_1\ X0\ X1))\wedge((v1\_funct\_1\ (k18\_valued\_1 \quad (4)$$
$$X0\ X1))\wedge(v1\_valued\_0\ (k18\_valued\_1\ X0\ X1))))$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\Rightarrow$$
$$(\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_valued\_0$$
$$X1)))\Rightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_valued\_0$$
$$X2)))\Rightarrow(k18\_valued\_1\ X0\ (k1\_rfunct\_1\ X1\ X2) = k1\_rfunct\_1\ (k18\_valued\_1$$
$$X0\ X1)\ X2)))$$