

# t13\_integra6

(TMJ4CeyGqqiUwSjnYKhHbrLALnXSDSJ5C3S)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v2\_measure5 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_comseq\_2 : \iota \Rightarrow o$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k20\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v3\_valued\_0 : \iota \Rightarrow o$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k18\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k45\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 \\ & X2) \wedge (v3\_valued\_0 X2))) \Rightarrow (\forall X3. ((v1\_relat\_1 X3) \wedge ((v1\_funct\_1 \\ & X3) \wedge (v3\_valued\_0 X3))) \Rightarrow (((v1\_comseq\_2 (k5\_relat\_1 X2 X0)) \wedge \\ & v1\_comseq\_2 (k5\_relat\_1 X3 X1))) \Rightarrow ((v1\_comseq\_2 (k5\_relat\_1 ( \\ & k18\_valued\_1 X2 X3) (k3\_xboole\_0 X0 X1))) \wedge (v1\_comseq\_2 (k5\_relat\_1 \\ & (k45\_valued\_1 X2 X3) (k3\_xboole\_0 X0 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1\_funct\_1 X2) \wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow (k2\_partfun1 \\ & X0 X1 X2 X3 = k5\_relat\_1 X2 X3) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v3\_membered \\ & X1) \wedge ((v3\_membered X2) \wedge (((v1\_funct\_1 X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1)))) \wedge ((v1\_funct\_1 X4) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X2))))))) \Rightarrow (k20\_valued\_1 X0 X1 X2 X3 X4 = k18\_valued\_1 \\ & X3 X4) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k3\_xboole\_0 X0 X0 = X0 \quad (4)$$

Assume the following.

$$v3\_membered\ k1\_numbers \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v3\_membered \\ & X1)\wedge((v3\_membered\ X2)\wedge(((v1\_funct\_1\ X3)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1\ X0\ X1))))\wedge((v1\_funct\_1\ X4)\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1\ X0\ X2))))))\Rightarrow((v1\_funct\_1\ (k20\_valued\_1\ X0\ X1\ X2 \\ & X3\ X4))\wedge(m1\_subset\_1\ (k20\_valued\_1\ X0\ X1\ X2\ X3\ X4)\ (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1\ X0\ k1\_numbers)))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v5\_relat\_1\ X0\ k1\_numbers))\Rightarrow((v1\_relat\_1\ X0)\wedge(v3\_valued\_0\ X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow((v4\_relat\_1\ X2\ X0)\wedge(v5\_relat\_1\ X2\ X1)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \quad (9)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v2\_measure5\ X0)\wedge(m1\_subset\_1 \\ & X0\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge \\ & (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))\Rightarrow \\ & (\forall X2.((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\ & k1\_numbers\ k1\_numbers))))\Rightarrow(((v1\_comseq\_2\ (k2\_partfun1\ k1\_numbers \\ & k1\_numbers\ X1\ X0))\wedge(v1\_comseq\_2\ (k2\_partfun1\ k1\_numbers\ k1\_numbers \\ & X2\ X0)))\Rightarrow(v1\_comseq\_2\ (k2\_partfun1\ k1\_numbers\ k1\_numbers\ (k20\_valued\_1 \\ & k1\_numbers\ k1\_numbers\ k1\_numbers\ X1\ X2)\ X0)))) \end{aligned}$$