t41_rinfsup2 (TMa-JPE7tftKNLSTMG7jhw7Q8gvGTZPWa7Lg)

October 27, 2020

Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k7\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v10\_mesfunc5 : \iota \Rightarrow o$ be given. Let $k2\_mesfunc5 : \iota \Rightarrow \iota$ be given. Let $k6\_rinfsup2 : \iota \Rightarrow \iota$ be given. Let $k5\_rinfsup2 : \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k1\_xxreal\_0 : \iota$ be given. Let $k2\_xxreal\_0 : \iota$ be given. Let $k2\_supinf\_1 : \iota$ be given. Let $k1\_supinf\_1 : \iota$ be given. Assume the following.

$$\forall X0.((v1\_funct\_1\ X0) \wedge ((v1\_funct\_2\ X0\ k5\_numbers\ k7\_numbers) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k7\_numbers))))) \Rightarrow ((v10\_mesfunc5\ X0) \Leftrightarrow (k6\_rinfsup2\ X0 = k5\_rinfsup2\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\neg(\neg X0 \in k1\_numbers) \wedge ((X0 \neq k1\_xxreal\_0) \wedge (X0 \neq k2\_xxreal\_0))) \tag{2}$$

Assume the following.

$$k2\_supinf\_1 = k2\_xxreal\_0 \tag{3}$$

Assume the following.

$$k1\_supinf\_1 = k1\_xxreal\_0 \tag{4}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0) \wedge ((v1\_funct\_2\ X0\ k5\_numbers\ k7\_numbers) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k7\_numbers))))) \Rightarrow (((k6\_rinfsup2\ X0 = k5\_rinfsup2\ X0) \wedge (k6\_rinfsup2\ X0 \in k1\_numbers)) \Rightarrow ((v10\_mesfunc5\ X0) \wedge ((k2\_mesfunc5\ X0 = k6\_rinfsup2\ X0) \wedge (k2\_mesfunc5\ X0 = k5\_rinfsup2\ X0)))) \tag{5}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k7\_numbers)\wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k7\_numbers)))))\Rightarrow (((k6\_rinfsup2\ X0 = k5\_rinfsup2\ X0)\wedge(k6\_rinfsup2\ X0 = k2\_supinf\_1))\Rightarrow ((v10\_mesfunc5\ X0)\wedge((k2\_mesfunc5\ X0 = k6\_rinfsup2\ X0)\wedge(k2\_mesfunc5\ X0 = k5\_rinfsup2\ X0))))) \tag{6}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k7\_numbers)\wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k7\_numbers)))))\Rightarrow (((k6\_rinfsup2\ X0 = k5\_rinfsup2\ X0)\wedge(k6\_rinfsup2\ X0 = k1\_supinf\_1))\Rightarrow ((v10\_mesfunc5\ X0)\wedge((k2\_mesfunc5\ X0 = k6\_rinfsup2\ X0)\wedge(k2\_mesfunc5\ X0 = k5\_rinfsup2\ X0))))) \tag{7}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k7\_numbers)\wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k7\_numbers)))))\Rightarrow (m1\_subset\_1\ (k6\_rinfsup2\ X0)\ k7\_numbers) \tag{8}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k7\_numbers)\Rightarrow(v1\_xxreal\_0\ X0) \tag{9}$$

Theorem 1

$$\forall X0.((v1\_funct\_1\ X0)\wedge((v1\_funct\_2\ X0\ k5\_numbers\ k7\_numbers)\wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ k7\_numbers)))))\Rightarrow ((v10\_mesfunc5\ X0)\Rightarrow((k2\_mesfunc5\ X0 = k6\_rinfsup2\ X0)\wedge(k2\_mesfunc5\ X0 = k5\_rinfsup2\ X0)))$$