

t17_integra5

(TMLk5X5a81pTrR1kim3Ndj6FUfwvJDtX4YY)

October 27, 2020

Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_measure5 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_fcont_1 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_integra5 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow (((v1_fcont_1 \\ & (k2_partfun1 k1_numbers k1_numbers X2 X0)) \wedge (r1_tarski X1 X0)) \Rightarrow \\ & (v1_fcont_1 (k2_partfun1 k1_numbers k1_numbers X2 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 \\ & X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\ & (((r1_tarski X0 (k1_relset_1 k1_numbers X1)) \wedge (v1_fcont_1 (k2_partfun1 \\ & k1_numbers k1_numbers X1 X0))) \Rightarrow (r1_integra5 X0 X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k1_numbers k1_numbers)))) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & (v2_measure5 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 k1_numbers)))) \Rightarrow \\ & (\forall X2. ((\neg v1_xboole_0 X2) \wedge ((v2_measure5 X2) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (((r1_tarski X1 (k1_relset_1 \\ & k1_numbers X0)) \wedge ((v1_fcont_1 (k2_partfun1 k1_numbers k1_numbers \\ & X0 X1)) \wedge (r1_tarski X2 X1))) \Rightarrow (r1_integra5 X2 X0))) \end{aligned}$$