

t6_integra4

(TMYjmPoJATV7pqZ9jqj3JFgJ1WiGRtFJ3LC)

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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 $k1_integral : \iota \Rightarrow \iota$ be given. Let $k3_integral : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v3_integral : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_integral : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_integral : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11_integral : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_integral : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_integral : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 \\ & \quad X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow \\ & \quad (\forall X2.(m1_subset_1 X2 (k1_integral X0)) \Rightarrow ((k3_integral \\ & \quad X0 = k6_numbers) \Rightarrow ((v2_integral X1 X0) \wedge (k11_integral X0 X1 = k6_numbers)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 \\ & \quad X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow \\ & \quad (\forall X2.(m1_subset_1 X2 (k1_integral X0)) \Rightarrow ((k3_integral \\ & \quad X0 = k6_numbers) \Rightarrow ((v1_integral X1 X0) \wedge (k10_integral X0 X1 = k6_numbers)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 \\ & \quad X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow \\ & \quad (k12_integral X0 X1 = k10_integral X0 X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 \\
& \quad X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& \quad (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow \\
& ((v3_integra1 X1 X0) \Leftrightarrow ((v1_integra1 X1 X0) \wedge ((v2_integra1 X1 X0) \wedge \\
& \quad (k10_integra1 X0 X1 = k11_integra1 X0 X1))))))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 \\
& \quad X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& \quad (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_integra1 X0)) \Rightarrow ((k3_integra1 \\
& \quad X0 = k6_numbers) \Rightarrow ((v3_integra1 X1 X0) \wedge (k12_integra1 X0 X1 = k6_numbers))))))
\end{aligned}$$