

t29_int_5

(TMYkk17mykFpCfBxStTYh472eZzZcBvwTW5)

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Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_int_2 : \iota \Rightarrow o$ be given. Let $k3_int_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $r2_int_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $k2_int_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_int_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r1_int_5 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (((k6_int_1 X1 X0 = k6_int_1 X2 X0) \Rightarrow ((X0 = k6_numbers) \vee \\ & (r2_int_1 X1 X2 X0)))) \wedge ((r2_int_1 X1 X2 X0) \Rightarrow (k6_int_1 X1 X0 = k6_int_1 \\ & X2 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v1_int_1 X2) \Rightarrow ((r2_int_1 X0 X1 X2) \Rightarrow (r2_int_1 X1 X0 X2)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (((r1_int_5 X0 X2) \wedge (r2_int_1 X0 X1 X2)) \Rightarrow (r1_int_5 \\ & X1 X2)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.((v7_ordinal1 X1) \wedge (v1_int_2 \\ & X1)) \Rightarrow (((r1_int_5 X0 X1) \Rightarrow ((k6_int_1 X0 X1 = k6_numbers) \vee (k2_int_5 \\ & X0 X1 = np_1))) \wedge (((r1_int_5 X0 X1) \wedge (k6_int_1 X0 X1 = k6_numbers)) \Rightarrow \\ & (k2_int_5 X0 X1 = k6_numbers)) \wedge (\neg(\neg(r1_int_5 X0 X1) \wedge (k6_int_1 \\ & X0 X1 \neq k6_numbers)) \wedge (\neg(r1_int_5 X0 X1) \wedge (k6_int_1 X0 X1 = k6_numbers)) \wedge \\ & (k2_int_5 X0 X1 \neq k4_xcmplx_0 np_1)))))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_int_1 X0) \Rightarrow (\forall X1.((v7_ordinal1 X1) \wedge (v1_int_2 \\ & X1)) \Rightarrow (\forall X2.(v1_int_1 X2) \Rightarrow (((k3_int_2 X0 X1 = np_1) \wedge (r2_int_1 \\ & X0 X2 X1)) \Rightarrow ((r1_xreal_0 X1 np_2) \vee (k2_int_5 X0 X1 = k2_int_5 X2 \\ & X1)))))) \end{aligned}$$