

t23_arytm_3 (TMaFE- VAF2P83pnM4jP72EhDKV8EStG3dcXg)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_arytm_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_arytm_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_ordinal3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k7_ordinal3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_arytm_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((k6_ordinal3 X0 np_1 = X0) \wedge (k7_ordinal3 X0 np_1 = k1_xboole_0)) \quad (1)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. ((v3_ordinal1 X1) \wedge (v7_ordinal1 X1)) \Rightarrow ((r1_arytm_3 X0 X1) \Leftrightarrow (k3_arytm_3 X0 X1 = np_1))) \quad (2)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. ((v3_ordinal1 X1) \wedge (v7_ordinal1 X1)) \Rightarrow (k4_arytm_3 X0 X1 = k6_ordinal3 X0 (k3_arytm_3 X0 X1))) \quad (3)$$

Theorem 1

$$\forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. ((v3_ordinal1 X1) \wedge (v7_ordinal1 X1)) \Rightarrow ((r1_arytm_3 X0 X1) \Rightarrow (k4_arytm_3 X0 X1 = X0)))$$