

t47_prepower
(TMX31rbBA9q8kwhnjJffB991WFZhQA73UTo)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_rat_1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k6_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_rat_1 : \iota \Rightarrow \iota$ be given. Let $k1_rat_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k4_prepower X0 k6_numbers = np_1) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \Rightarrow (k2_prepower np_1 X0 = X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_rat_1 X0) \Rightarrow ((k2_rat_1 X0 = X0) \Leftrightarrow (k1_rat_1 X0 = np_1)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_rat_1 X0) \Rightarrow ((k2_rat_1 X0 = k6_numbers) \Leftrightarrow (X0 = k6_numbers)) \quad (4)$$

Assume the following.

$$m1_subset_1 np_1 k1_numbers \quad (5)$$

Assume the following.

$$r1_xxreal_0 k6_numbers np_1 \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_rat_1 X1) \Rightarrow (k6_prepower X0 X1 = k2_prepower (k1_rat_1 X1) (k4_prepower X0 (k2_rat_1 X1)))) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (8)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_rat_1 X1) \Rightarrow ((X1 = k6_numbers) \Rightarrow (k6_prepower X0 X1 = np_1)))$$