t43_power (TMEudzpE4e1KwsnDDiMXD7bXZ2tbGQ7Hx46)

October 27, 2020

Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $k3\_power : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k9\_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (v1\_xreal\_0\ (k3\_power\ X0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow (((\neg r1\_xxreal\_0\ X0\ k6\_numbers) \Rightarrow ((X2 = k3\_power\ X0\ X1) \Leftrightarrow (X2 = k9\_prepower\ X0\ X1))) \wedge (((X0 = k6\_numbers) \Rightarrow ((r1\_xxreal\_0\ X1\ k6\_numbers) \vee ((X2 = k3\_power\ X0\ X1) \Leftrightarrow (X2 = k6\_numbers)))) \wedge ((v1\_int\_1\ X1) \Rightarrow ((X2 = k3\_power\ X0\ X1) \Leftrightarrow (\exists X3.(v1\_int\_1\ X3) \wedge ((X3 = X1) \wedge (X2 = k4\_prepower\ X0\ X3)))))))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_int\_1\ X0) \Rightarrow (v1\_xreal\_0\ X0) \tag{3}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (k3\_power\ X0\ X1 = k4\_prepower\ X0\ X1))$$