# t31_power (TMMfKCpaQqvhAxfk-MxNfF6XusvkVU1BwvHB)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k3\_power : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $k4\_prepower : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xreal\_0\ X2) \Rightarrow (\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers) \wedge ((\neg r1\_xxreal\_0\ X1\ k6\_numbers) \wedge (k9\_prepower\ (k13\_complex1\ X0\ X1)\ X2 \neq k13\_complex1\ (k9\_prepower\ X0\ X2)\ (k9\_prepower\ X1\ X2))))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers) \wedge ((\neg r1\_xxreal\_0\ X1\ k6\_numbers) \wedge (r1\_xxreal\_0\ (k7\_xcmplx\_0\ X0\ X1)\ k6\_numbers)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k13\_complex1\ X0\ X1 = k7\_xcmplx\_0\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (v1\_xreal\_0\ (k7\_xcmplx\_0\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (v1\_xreal\_0\ (k9\_prepower\ X0\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\forall X2.\ (v1\_xreal\_0\ X2)\Rightarrow(((\neg r1\_xxreal\_0\ X0\ k6\_numbers)\Rightarrow((X2 = k3\_power\ X0\ X1)\Leftrightarrow(X2 = k9\_prepower\ X0\ X1)))\wedge(((X0 = k6\_numbers)\Rightarrow((r1\_xxreal\_0\ X1\ k6\_numbers)\vee((X2 = k3\_power\ X0\ X1)\Leftrightarrow(X2 = k6\_numbers))))\wedge((v1\_int\_1\ X1)\Rightarrow((X2 = k3\_power\ X0\ X1)\Leftrightarrow(\exists X3.(v1\_int\_1\ X3)\wedge((X3 = X1)\wedge\ (X2 = k4\_prepower\ X0\ X3)))))))))) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{7}$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\forall X2.\ (v1\_xreal\_0\ X2)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers)\wedge((\neg r1\_xxreal\_0\ X1\ k6\_numbers)\wedge(k3\_power\ (k13\_complex1\ X0\ X1)\ X2\neq k13\_complex1\ (k3\_power\ X0\ X2)\ (k3\_power\ X1\ X2))))))$$