t24_borsuk_5 (TMMVwQHphQXZGcRqmiosmf-bRxCwwPFeu7Mi)

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Let $v1\_rat\_1 : \iota \Rightarrow o$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k13\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xcmplx\_0\ X2) \Rightarrow (k7\_xcmplx\_0\ X0\ (k7\_xcmplx\_0\ X1\ X2) = k7\_xcmplx\_0\ (k3\_xcmplx\_0\ X0\ X2)\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k13\_complex1\ X0\ X1 = k7\_xcmplx\_0\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow ((X0 \neq k6\_numbers) \Rightarrow (X1 = k7\_xcmplx\_0\ (k3\_xcmplx\_0\ X1\ X0)\ X0))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_rat\_1\ X0) \wedge (v1\_rat\_1\ X1)) \Rightarrow (v1\_rat\_1\ (k7\_xcmplx\_0\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k3\_xcmplx\_0\ X0\ X1 = k3\_xcmplx\_0\ X1\ X0) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xcmplx\_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_rat\_1\ X0) \Rightarrow (v1\_xreal\_0\ X0) \tag{7}$$

Theorem 1

$$\forall X0.(v1\_rat\_1\ X0) \Rightarrow (\forall X1.((v1\_xreal\_0\ X1) \wedge (\neg v1\_rat\_1\ X1)) \Rightarrow (\neg(X0 \neq k6\_numbers) \wedge (v1\_rat\_1\ (k13\_complex1\ X0\ X1))))$$