

t2\_cardfin2  
(TMcF226aYH6hTE6ZpBrx4fvajjVA3CZX6VC)

October 27, 2020

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  $np\_1 : \iota$  be given. Let  $k25\_sin\_cos : \iota \Rightarrow \iota$  be given. Let  $k9\_prepower : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k26\_sin\_cos : \iota \Rightarrow \iota$  be given. Let  $k3\_power : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_power : \iota$  be given. Let  $k7\_power : \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow ((k9\_prepower (k26\_sin\_cos np\_1) \\ X0 = k25\_sin\_cos X0) \wedge ((k3\_power (k26\_sin\_cos np\_1) X0 = k25\_sin\_cos \\ X0) \wedge ((k3\_power k8\_power X0 = k25\_sin\_cos X0) \wedge (k9\_prepower k8\_power \\ X0 = k25\_sin\_cos X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\neg(\neg \\ r1\_xxreal\_0 X0 np\_1) \wedge ((\neg r1\_xxreal\_0 k6\_numbers X1) \wedge (r1\_xxreal\_0 \\ np\_1 (k3\_power X0 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$k8\_power = k7\_power \tag{3}$$

Assume the following.

$$\neg r1\_xxreal\_0 k8\_power np\_1 \tag{4}$$

Assume the following.

$$v1\_xreal\_0 k7\_power \tag{5}$$

Assume the following.

$$k7\_power = k26\_sin\_cos np\_1 \tag{6}$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\neg(\neg r1\_xxreal\_0 k6\_numbers X0) \wedge ( \\ r1\_xxreal\_0 np\_1 (k25\_sin\_cos X0))) \end{aligned}$$