t86_rewrite3 (TMTFv83i6YdAnci7Muqj1CVdddjKKkjjTdh)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8\_afinsq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3\_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_rewrite1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.\ (m1\_subset\_1\ X3\ (k8\_afinsq\_1\ X2)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k8\_afinsq\_1\ X2)) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (k8\_afinsq\_1\ X2)) \Rightarrow (\forall X6.(m1\_subset\_1\ X6\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X2))) \Rightarrow (\forall X7.((\neg v2\_struct\_0\ X7) \wedge (l1\_rewrite3\ X7\ X6)) \Rightarrow ((r1\_rewrite1\ (k1\_rewrite3\ X2\ X6\ X7)\ (k4\_tarski\ X0\ X3)\ (k4\_tarski\ X1\ X4)) \Rightarrow (r1\_rewrite1\ (k1\_rewrite3\ X2\ X6\ X7)\ (k4\_tarski\ X0\ (k1\_flang\_1\ X2\ X3\ X5))\ (k4\_tarski\ X1\ (k1\_flang\_1\ X2\ X4\ X5)))))))))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0))) \Rightarrow (\forall X2.((\neg v2\_struct\_0\ X2) \wedge (l1\_rewrite3\ X2\ X1)) \Rightarrow (\forall X3.\forall X4.\forall X5.\forall X6.(r3\_rewrite3\ X0\ X1\ X2\ X3\ X4\ X5\ X6) \Leftrightarrow (r1\_rewrite1\ (k1\_rewrite3\ X0\ X1\ X2)\ (k4\_tarski\ X3\ X4)\ (k4\_tarski\ X5\ X6))))) \tag{2}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.\ (m1\_subset\_1\ X3\ (k8\_afinsq\_1\ X2)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k8\_afinsq\_1\ X2)) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (k8\_afinsq\_1\ X2)) \Rightarrow (\forall X6.(m1\_subset\_1\ X6\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X2))) \Rightarrow (\forall X7.((\neg v2\_struct\_0\ X7) \wedge (l1\_rewrite3\ X7\ X6)) \Rightarrow ((r3\_rewrite3\ X2\ X6\ X7\ X0\ X3\ X1\ X4) \Rightarrow (r3\_rewrite3\ X2\ X6\ X7\ X0\ (k1\_flang\_1\ X2\ X3\ X5)\ X1\ (k1\_flang\_1\ X2\ X4\ X5))))))))$$