

## t35\_int\_1

(TMXRxaLewJ3L5DYhWgBYHaJNpXusRpVEQfq)

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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  $k2\_int\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_int\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $k5\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((\neg(\neg r1\_xxreal\_0 (k2\_int\_1 X0) X0) \wedge (v1\_int\_1 X0)) \wedge (\neg(\neg v1\_int\_1 X0) \wedge (r1\_xxreal\_0 (k2\_int\_1 X0) X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((\neg(\neg r1\_xxreal\_0 X0 (k1\_int\_1 X0)) \wedge (v1\_int\_1 X0)) \wedge (\neg(\neg v1\_int\_1 X0) \wedge (r1\_xxreal\_0 X0 (k1\_int\_1 X0)))) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2.(v1\_xreal\_0 X2) \Rightarrow (((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X2)) \Rightarrow (r1\_xxreal\_0 X0 X2)))) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_int\_1 (k2\_int\_1 X0)) \quad (4)$$

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$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_int\_1 (k1\_int\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_int\_1 X1) \Rightarrow ((X1 = k1\_int\_1 X0) \Leftrightarrow ((r1\_xxreal\_0 X1 X0) \wedge (\neg r1\_xxreal\_0 X1 (k5\_real\_1 X0 np\_1)))))) \quad (6)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0) \Rightarrow (v1\_xreal\_0 X0) \quad (7)$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((\neg(\neg r1\_xxreal\_0 (k2\_int\_1 X0) (k1\_int\_1 X0)) \wedge (v1\_int\_1 X0)) \wedge (\neg(\neg v1\_int\_1 X0) \wedge (r1\_xxreal\_0 (k2\_int\_1 X0) (k1\_int\_1 X0))))$$