

## t3\_integr19

(TMUY8EZbbjDrm9rkFXS29Ycn6P3RqCV8uX1)

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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  $k3\_integra5 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X2)) \Rightarrow (r1\_tarski X0 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1\_xreal\_0 X0) \Rightarrow (\forall X1. (v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xreal\_0 X2) \Rightarrow (\forall X3. (v1\_xreal\_0 X3) \Rightarrow (((r1\_xxreal\_0 \\ X0 X1) \wedge ((X2 \in k3\_integra5 X0 X1) \wedge (X3 \in k3\_integra5 X0 X1))) \Rightarrow (r1\_tarski \\ (k3\_integra5 (k3\_xxreal\_0 X2 X3) (k4\_xxreal\_0 X2 X3)) (k3\_integra5 \\ X0 X1))))))) \end{aligned} \quad (2)$$

### Theorem 1

$$\begin{aligned} \forall X0. \forall X1. (v1\_xreal\_0 X1) \Rightarrow (\forall X2. (v1\_xreal\_0 \\ X2) \Rightarrow (\forall X3. (v1\_xreal\_0 X3) \Rightarrow (\forall X4. (v1\_xreal\_0 X4) \Rightarrow \\ (((r1\_xxreal\_0 X1 X2) \wedge ((X3 \in k3\_integra5 X1 X2) \wedge ((X4 \in k3\_integra5 \\ X1 X2) \wedge (r1\_tarski (k3\_integra5 X1 X2) X0)))) \Rightarrow (r1\_tarski (k3\_integra5 \\ (k3\_xxreal\_0 X3 X4) (k4\_xxreal\_0 X3 X4)) X0)))))) \end{aligned}$$