

## t60\_topreal9

(TMY2hwr5WRjFVvkZ2oEeXUvukWpX2xMhvdCQ)

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Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k5\_jgraph\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_jgraph\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k19\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xreal\_0 X2) \Rightarrow (k3\_topreal9 np\_2 (k19\_euclid X0 X1) X2 = k5\_jgraph\_6 \\ & X0 X1 X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xreal\_0 X2) \Rightarrow (k1\_topreal9 np\_2 (k19\_euclid X0 X1) X2 = k6\_jgraph\_6 \\ & X0 X1 X2))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(v1\_xreal\_0 \\ & X1) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow \\ & (\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow ( \\ & \forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 (k15\_euclid X0))) \Rightarrow ( \\ & (X2 \in k3\_topreal9 X0 X3 X1) \wedge (X4 \in k3\_topreal9 X0 X3 X1) \Rightarrow (r1\_tarski \\ & (k7\_subset\_1 (u1\_struct\_0 (k15\_euclid X0)) (k1\_rltopsp1 (k15\_euclid \\ & X0) X2 X4) (k2\_tarski X2 X4) (k1\_topreal9 X0 X3 X1))))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_2) \wedge (m2\_subset\_1 np\_2 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_2 k5\_numbers) \wedge (m1\_subset\_1 np\_2 k1\_numbers)) \end{aligned} \tag{4}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0)\wedge(v1\_xreal\_0 X1))\Rightarrow(m1\_subset\_1 (k19\_euclid X0 X1) (u1\_struct\_0 (k15\_euclid np\_2))) \quad (6)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0)\Rightarrow(\forall X1.(v1\_xreal\_0 X1)\Rightarrow(\forall X2. \\ & (v1\_xreal\_0 X2)\Rightarrow(\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 (k15\_euclid \\ & np\_2))))\Rightarrow(\forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 (k15\_euclid \\ & np\_2))))\Rightarrow(((X3 \in k5\_jgraph\_6 X0 X1 X2)\wedge(X4 \in k5\_jgraph\_6 X0 X1 X2))\Rightarrow \\ & (r1\_tarski (k7\_subset\_1 (u1\_struct\_0 (k15\_euclid np\_2)) (k1\_rltopsp1 \\ & (k15\_euclid np\_2) X3 X4) (k2\_tarski X3 X4) (k6\_jgraph\_6 X0 X1 X2)))))) \end{aligned}$$