

# t8\_hurwitz (TMWmGYPE- bkmC8pPbkXtgnaggadLj9coeNyS)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v5\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $l6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_fvsum\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v1\_algstr\_1 : \iota \Rightarrow o$  be given. Let  $v1\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $l2\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l5\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v4\_algstr\_1 : \iota \Rightarrow o$  be given. Let  $v2\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v5\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v2\_algstr\_1 : \iota \Rightarrow o$  be given. Let  $v3\_algstr\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((v6\_algstr\_0 X0) \wedge ((v1\_algstr\_1 \\ &X0) \wedge ((v1\_vectsp\_1 X0) \wedge (l6\_algstr\_0 X0)))) \Rightarrow (\forall X1. (m1\_subset\_1 \\ &X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. (m2\_finseq\_1 X2 (u1\_struct\_0 \\ &X0)) \Rightarrow (k4\_rlvect\_1 X0 (k9\_fvsum\_1 X0 X2 X1) = k6\_algstr\_0 X0 X1 (k4\_rlvect\_1 \\ &X0 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (l6\_algstr\_0 X0) \Rightarrow ((l2\_algstr\_0 X0) \wedge (l5\_algstr\_0 X0)) \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. (l2\_algstr\_0 X0) \Rightarrow (&((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 \\ &X0) \wedge ((v3\_rlvect\_1 X0) \wedge (v4\_rlvect\_1 X0)))) \Rightarrow ((\neg v2\_struct\_0 X0) \wedge \\ &((v1\_algstr\_1 X0) \wedge (v4\_algstr\_1 X0)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0. (l6\_algstr\_0 X0) \Rightarrow (&((\neg v2\_struct\_0 X0) \wedge (v5\_vectsp\_1 \\ &X0)) \Rightarrow ((\neg v2\_struct\_0 X0) \wedge ((v1\_vectsp\_1 X0) \wedge (v2\_vectsp\_1 X0)))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0. (l2\_algstr\_0 X0) \Rightarrow (&((\neg v2\_struct\_0 X0) \wedge (v4\_algstr\_1 \\ &X0)) \Rightarrow ((\neg v2\_struct\_0 X0) \wedge ((v5\_algstr\_0 X0) \wedge ((v6\_algstr\_0 X0) \wedge \\ &((v2\_algstr\_1 X0) \wedge (v3\_algstr\_1 X0)))))) \end{aligned} \tag{5}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v5\_vectsp\_1 \\ & X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge (l6\_algstr\_0 X0)))))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m2\_finseq\_1 \\ & X2 (u1\_struct\_0 X0)) \Rightarrow (k6\_algstr\_0 X0 X1 (k4\_rlvect\_1 X0 X2) = k4\_rlvect\_1 \\ & X0 (k9\_fvsum\_1 X0 X2 X1)))) \end{aligned}$$