Demostrar:
$$((\alpha \rightarrow \beta) \rightarrow (77 \rightarrow 76)) \rightarrow \beta = (\beta \rightarrow \alpha) \rightarrow (6 \rightarrow \alpha)$$

Aplico el teorena de la deducción:

Aplica teorema de la deducción:

$$\left(\left((\alpha \rightarrow \beta) \rightarrow (77 \rightarrow 75)\right) \rightarrow \delta\right) \rightarrow \beta, \beta \rightarrow \alpha, \delta \models \alpha$$

Por la que hay que denostrar es que el conjurto de pormulas

es insatisfacible.

Calculamos la forma clausular de cada una de las formulas:

•
$$\left(\left((\alpha \rightarrow \beta) \rightarrow (7 \delta \rightarrow 7 \delta)\right) \rightarrow \delta\right) \rightarrow \beta$$
 = $7\left(7\left(7(\alpha \vee \beta) \vee (7 \vee 7 \delta)\right) \vee \delta\right) \vee \beta$ = $=\left(77\left(7(\alpha \vee \beta) \vee (7 \vee 7 \delta)\right) \wedge 7 \delta\right) \vee \beta$ = $=\left(\left((\alpha \wedge 7 \beta) \vee (7 \vee 7 \delta)\right) \wedge 7 \delta\right) \vee \beta$ = $=\left(\left((\alpha \wedge 7 \beta) \vee (7 \vee 7 \delta)\right) \wedge 7 \delta\right) \vee \beta$ = $=\left(\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left(\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$ = $=\left((\alpha \vee 7 \vee 7 \delta) \wedge 7 \delta\right) \vee \beta$

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$$= \left((\alpha v 8 v 7 \delta v B) \wedge (7 \beta v 8 v \delta v B) \right) \wedge \left(7 \delta v \beta \right) =$$

$$= \left((\alpha v 8 v 7 \delta v B) \wedge (8 v \delta) \right) \wedge \left(7 \delta v \beta \right)$$

. 5

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Por tanto, hemos de probar que el conjunto de claimeulas | XU8V75UB, YVJ, 75UB, 7BYX, 6, 7 x }

es insatisfacible.

$$\begin{cases} \alpha v r v 7 \delta v \beta, r v \delta, r \delta v \beta, r \alpha \end{cases}$$
 $\begin{cases} T \mid \lambda = r \alpha; \lambda^c = \alpha \end{cases}$

$$\pi \mid \lambda = 76 ; \lambda' = 6$$