EXAM 14.01.19

$\forall x\ MA(x) \Rightarrow Happy(x)$
$\forall x\ \neg MA(x) \Rightarrow Relaxed(x)$
$\forall x\ Relaxed(x) \Rightarrow Happy(x)$

CNF:
$\neg MA(x) \vee Happy(x)$ HORN!
$MA(x) \vee Relaxed(x)$ NOT HORN!
$\neg Relaxed(x) \vee Happy(x)$ HORN!

$KB = \{\{\neg MA(x), Happy(x)\}_1, \{MA(x), Relaxed(x)\}_2, \{\neg Relaxed(x), Happy(x)\}_3\}$.

I have to negate the thesis! $\{\neg Happy(Antonio)\}_4$

1 and 3 $\Rightarrow \{\neg MA(x), \neg Relaxed(x), Happy(x)\}_\alpha$
α and 2 $\Rightarrow \{Happy(x)\}_\beta$
β and 4 $\Rightarrow \{\}$

$P(x,c) \wedge Q(c,x)$
Correct.