

PHIL. 225 - SYMBOLIC LOGIC

FINAL REVIEW

POSSIBLE ANSWERS - 7

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$\forall x \exists y \neg Fxy$  is not derivable

Any model that makes the premises true will work, since the negation of the sentence is a consequence of the premises. Given that  $\forall x \forall y Fxy$  is also a consequence,  $F$  will need to be  $D=D$ .

E.g.  $D = \{0, 1\}$

$F = \{ \langle 0, 0 \rangle, \langle 0, 1 \rangle, \langle 1, 0 \rangle, \langle 1, 1 \rangle \}$