

Atomic tableaux (FOPL)

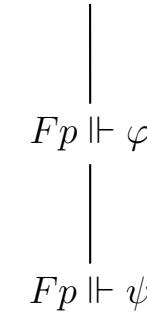
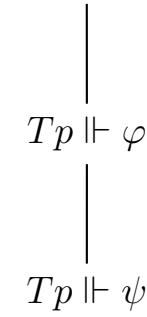
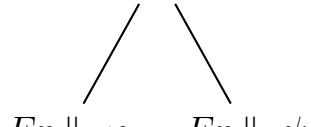
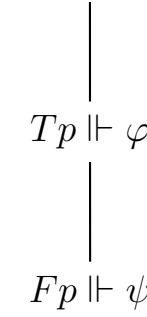
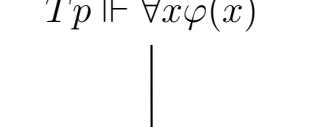
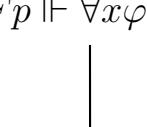
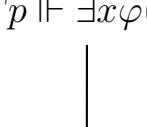
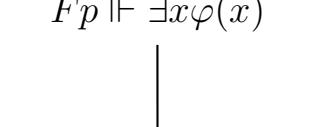
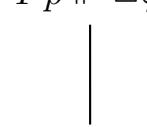
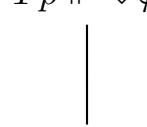
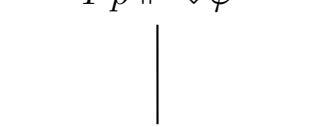
TA	FA	$T(\alpha \wedge \beta)$ $T\alpha$ $T\beta$	$F(\alpha \wedge \beta)$ $F\alpha$ $F\beta$
$T(\neg \alpha)$ $F\alpha$	$F(\neg \alpha)$ $T\alpha$	$T(\alpha \vee \beta)$ $T\alpha$ $T\beta$	$F(\alpha \vee \beta)$ $F\alpha$ $F\beta$
$T(\alpha \Rightarrow \beta)$ $F\alpha$ $T\beta$	$F(\alpha \Rightarrow \beta)$ $T\alpha$ $F\beta$	$T(\alpha \Leftrightarrow \beta)$ $T\alpha$ $F\alpha$ $T\beta$ $F\beta$	$F(\alpha \Leftrightarrow \beta)$ $T\alpha$ $F\alpha$ $F\beta$ $T\beta$
$T(\forall x \varphi(x))$ $T\varphi(t)$ <p>for any ground term t</p>	$F(\forall x \varphi(x))$ $F\varphi(c)$ <p>for a new constant c</p>	$T(\exists x \varphi(x))$ $T\varphi(c)$ <p>for a new constant c</p>	$F(\exists x \varphi(x))$ $F\varphi(t)$ <p>for any ground term t</p>

Atomic tableaux (modal logic)

$Tp \Vdash \varphi$

$Fp \Vdash \varphi$

for any atomic sentence φ and any p

$Tp \Vdash \varphi \vee \psi$ 	$Fp \Vdash \varphi \vee \psi$ 	$Tp \Vdash \varphi \wedge \psi$ 	$Fp \Vdash \varphi \wedge \psi$ 
$Tp \Vdash \varphi \Rightarrow \psi$ 	$Fp \Vdash \varphi \Rightarrow \psi$ 	$Tp \Vdash \neg \varphi$ 	$Fp \Vdash \neg \varphi$ 
$Tp \Vdash \forall x \varphi(x)$  for any appropriate c	$Fp \Vdash \forall x \varphi(x)$  for some new c	$Tp \Vdash \exists x \varphi(x)$  for some new c	$Fp \Vdash \exists x \varphi(x)$  for any appropriate c
$Tp \Vdash \Box \varphi$  for any appropriate q	$Fp \Vdash \Box \varphi$  for some new q	$Tp \Vdash \Diamond \varphi$  for some new q	$Fp \Vdash \Diamond \varphi$  for any appropriate q