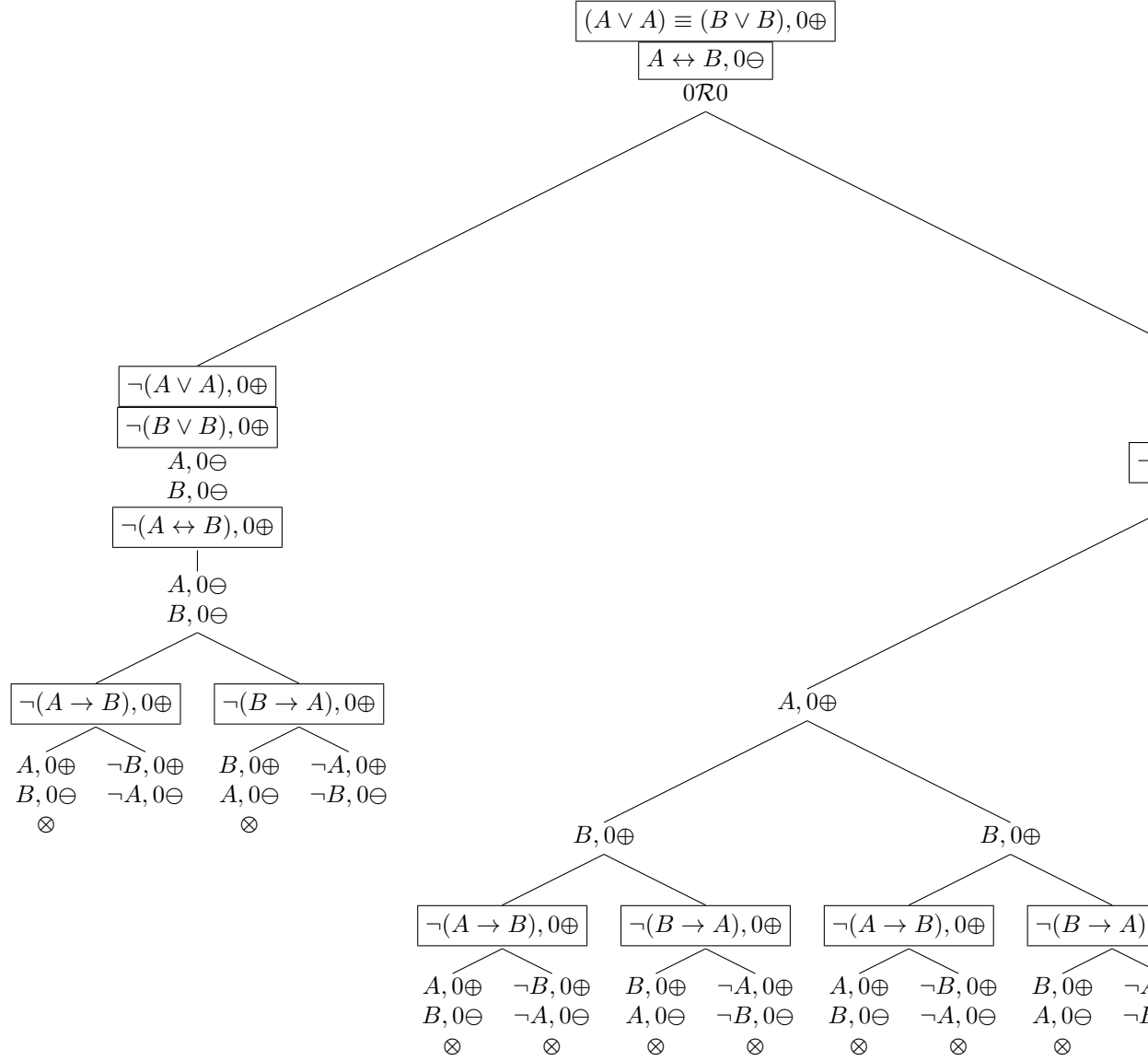


$$(1) \ A \leftrightarrow B \vdash (A \vee A) \equiv (B \vee B)$$



(2) $(A \vee A) \equiv (B \vee B) \not\models A \leftrightarrow B$



Counter Model:

$\mathcal{W} = \{w_0\}$
 $\mathcal{R} = \{\langle w_0, w_0 \rangle\}$
 $\nu_{w_0}(A) = .5$
 $\nu_{w_0}(B) = 0$