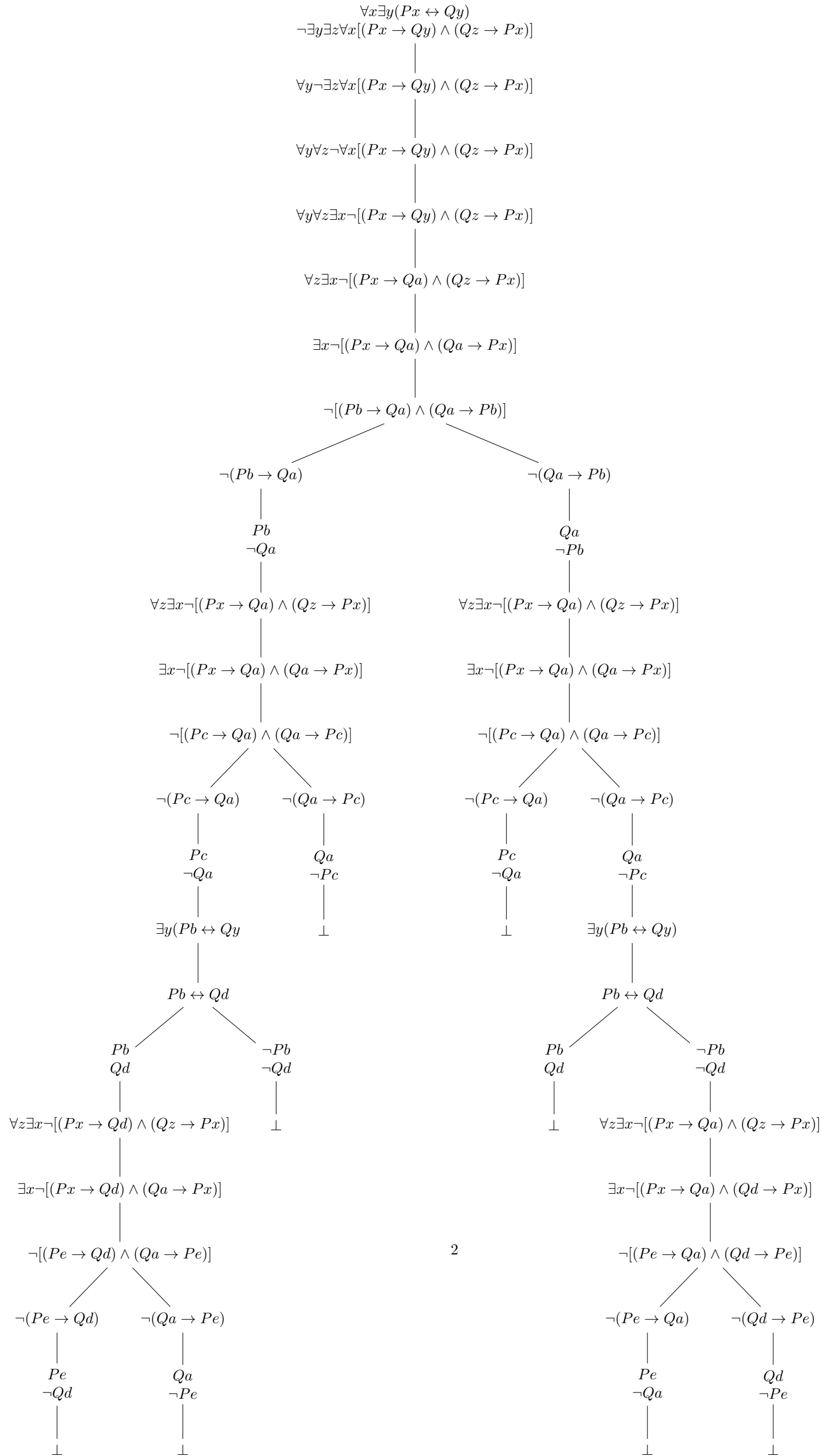
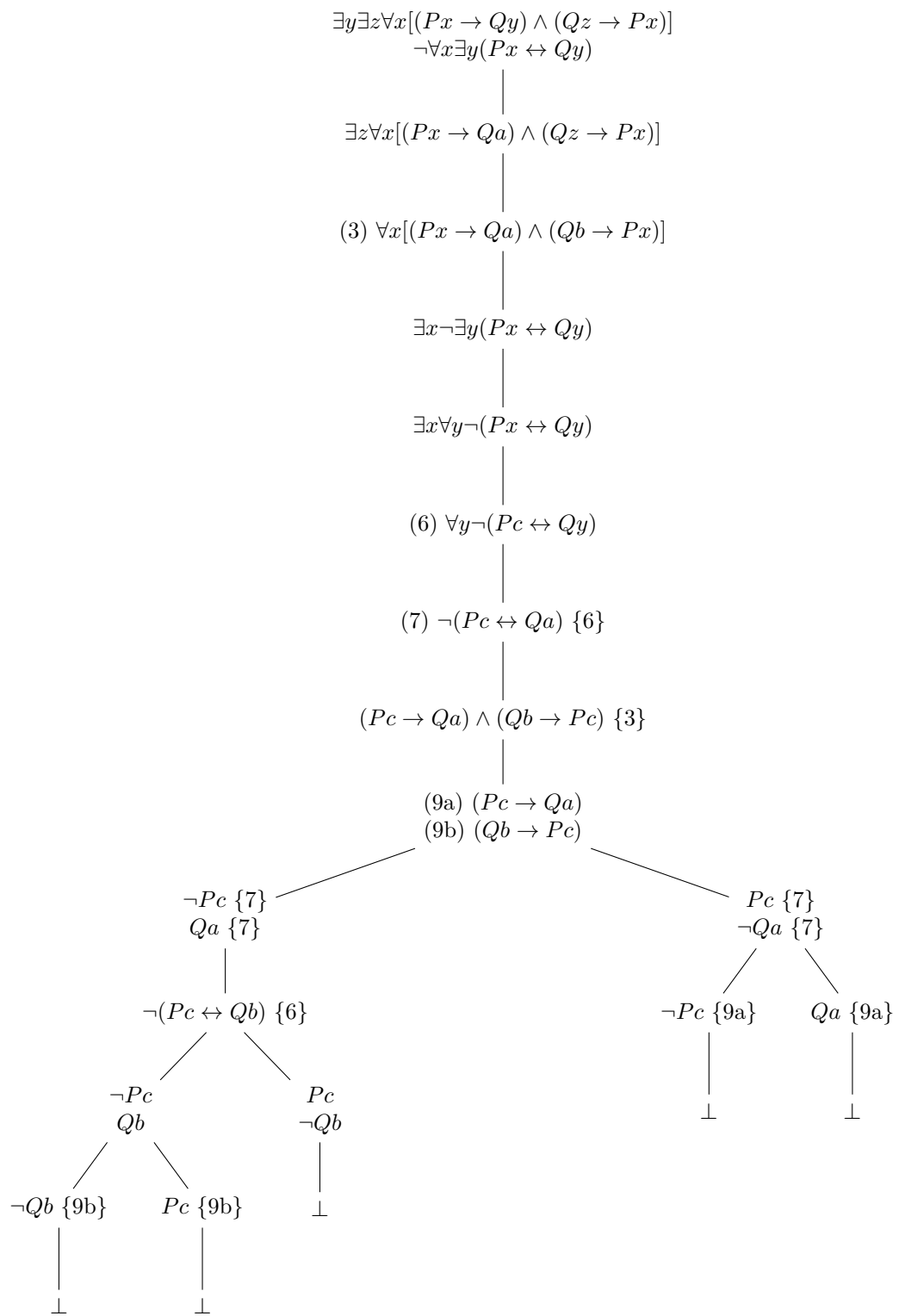


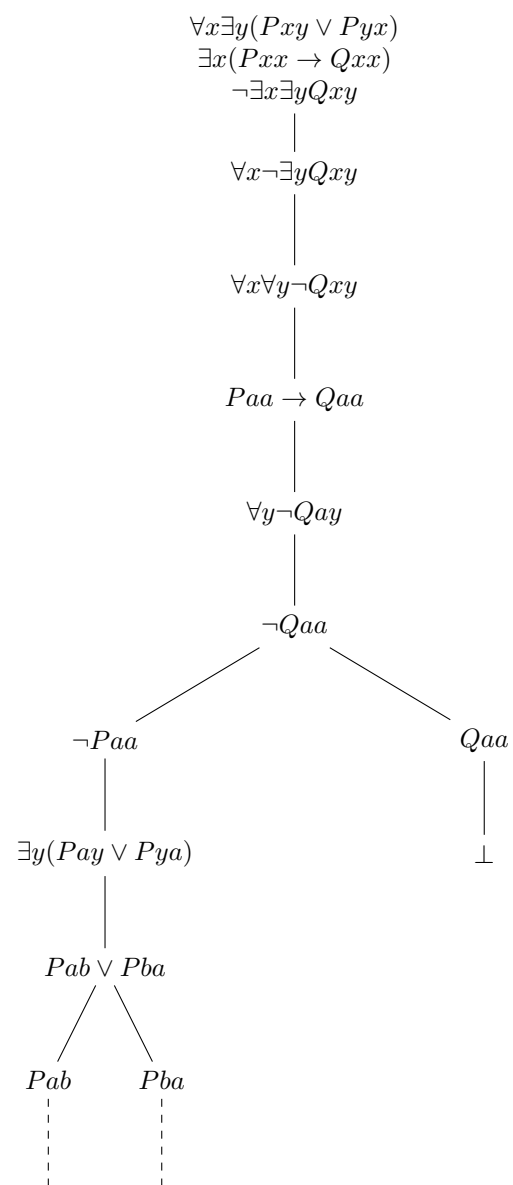
1 Solutions

1.1 Problem 1





1.2 Problem 2



A countermodel can be got by letting the domain of discourse be $\{a, b\}$, with $P = \{(a, b)\}$ and $Q = \emptyset$.

1.3 Problem 3

