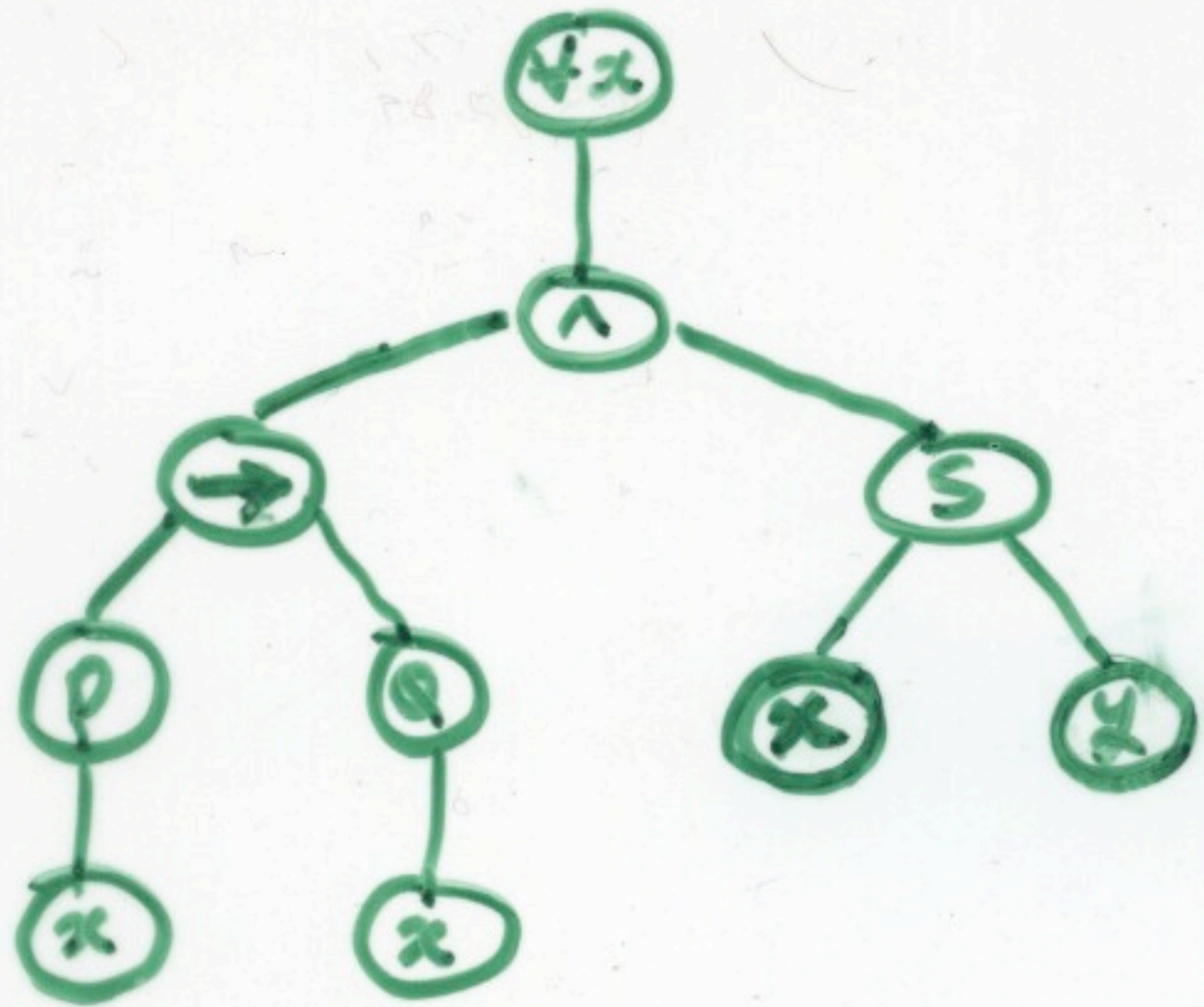


- Parse tree can be used to verify syntax - correctness.

$$\forall x ( (P(x) \wedge Q(x)) \rightarrow S(x, y) )$$



To be syntactically correct, the parse tree should follow the rules of generating a formula.

Term,  $t = c \mid x \mid f(t_1, \dots, t_n)$

Formula,  $\phi = \tau(t_1, \dots, t_n) \mid \phi_1 \wedge \phi_2 \mid \neg \phi \mid \forall x \phi(x)$

constant = zero-ary function

proposition = zero-ary relation.