procedure FORWARD-CHAIN(KB, p)

if there is a sentence in KB that is a renaming of p **then return**
Add p to KB
for each $(p_1 \wedge \ldots \wedge p_n \Rightarrow q)$ **in** KB such that for some i, UNIFY$(p_i, p) = \theta$ succeeds **do**
    FIND-AND-INFER(KB, $[p_1, \ldots, p_{i-1}, p_{i+1}, \ldots, p_n]$, q, θ)
end

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procedure FIND-AND-INFER(KB, *premises*, *conclusion*, θ)

if *premises* = [ ] **then**
    FORWARD-CHAIN(KB, SUBST(θ, *conclusion*))
else for each p' **in** KB such that UNIFY(p', SUBST(θ, FIRST(*premises*))) = θ_2 **do**
    FIND-AND-INFER(KB, REST(*premises*), *conclusion*, COMPOSE(θ, θ_2))
end