Boolean Satisfiability

IN: Boolean Formula F
OUT: IF some assignment I satisfies F; I ("sat") otherwise: False ("unsat")

function solve (assign, fmla):
  fmla = unit propagation (fmla)
  fmla = pure elimination (fmla)
  if fmla contains empty clause:
    return "unsat"
  if fmla contains nothing:
    return assign
  x = pick variable (fmla)
  attempt :=
    solve (assign + x fmla)
  if attempt succeeded:
    return attempt
  else:
    return solve (assign + x̄ fmla)

What do you notice?
eliminate or its negation.

(x̄₁) and
(x₂ or x₃) and
()