

ROBDD example (see slide 6-10 for diagram)

$$f = ab + \sim ac + b\sim cd$$

$$\begin{aligned}
 &= a(b + \sim cd) && + \sim a(c + \sim cd) \\
 &= a(b(1 + \sim cd) + \sim b(0 + 0)) && + \sim a(b(c + \sim cd) && + \sim b(c + \sim cd)) \\
 &= a(b(1) + \sim b(0)) && + \sim a(b(c(1 + 0) + \sim c(0 + d)) && + \sim b(c(1 + 0) + \sim c(0 + d))) \\
 &= a(b(1) + \sim b(0)) && + \sim a(b(c(1) + \sim c(d)) && + \sim b(c(1) + \sim c(d))) \\
 &= a(b(1) + \sim b(0)) && + \sim a(b(c(1) + \sim c(d(1) + \sim d(0))) && + \sim b(c(1) + \sim c(d(1) + \sim d(0))))
 \end{aligned}$$