

ROBDD example (see slide 6-10 for diagram)

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

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