

1 Homework 3

1.1 Boolean Algebra

1. Simplify the following expressions using Boolean algebraic laws. Give each step of your simplification and denote which laws you're using for each step. Do not skip or combine steps!

(a) $A * (\overline{A} + B * B) + \overline{(B + A)} * (\overline{A} + B)$

(b) $\overline{C * B} + (A * B * C) + \overline{A + B + \overline{B}}$

(c) $(A + B) * (\overline{A} + C) * (\overline{C} + B)$