

1. Do Exercise 5.1(a, c, d).
2. Re-prove (3.47a) De Morgan using proof by contradiction.
For this problem, you must start with (3.9) as the first step. You are not allowed to simply replicate the proof for (3.47a) and then negate the expression at the end of the proof to make it false.
3. Re-prove (3.76c) Weakening/strengthening using proof by contrapositive.