

1. Do Exercise 11.14.
2. Prove (11.45).
You cannot use metatheorem (11.25) because you are proving an equivalence between two boolean expressions, not a set equality.
3. Prove (11.46).
You cannot use metatheorem (11.25) because you are proving an equivalence between two boolean expressions, not a set equality.
4. Prove (11.48).
You cannot use metatheorem (11.25) because you are proving an equivalence between two boolean expressions, not a set equality.
5. Prove (11.49).
You cannot use the metatheorem. Use the technique of (11.11b). Some early printings of the book have equivalence between the two set expressions. It should be equals.
6. Prove (11.50).
Manipulate to get a form that will allow you to use the metatheorem.
7. Prove (11.57).
Start with (11.13) twice on the LHS.
8. Prove (11.58).