

1. Carothers 17.30
(We proved this result in class for the case of pointwise *everywhere* convergence.)
2. Carothers 17.33
3. Carothers 17.35
4. Carothers 17.36
5. Carothers 17.43
(The problem suggests you need to modify the proof of 17.20. Don't. Cite other results for a quick proof.)
6. Carothers 17.44
7. Carothers 17.46
You may assume the domain of f is $[a, b]$ if you like.
8. Carothers 17.48
9. Carothers 18.1
10. Carothers 18.3