Homework Assignment #4
Due at the beginning of class on Monday, February 11

Exercises 4-3
6, 8  (Hint on #8: remember ∨I.)

Exercises 4-4
2, 6, 10

Exercises 4-6
2, 6, 14

Exercises 5-1
10, 12 (see below—the page on which these appear in the book was not photocopied)
(Hint for #10: use SC or MT.  Hint for #12: use indirect derivation and MT.)

10.  Q ∨ L.  L → T.  Q → T  ⊢ T


Exercises 5-3
2, 4, 6, 10

Theorems
Provide derivations of the following theorems.

1.  (P ∨ Q) → (¬ Q → P)

2.  (P & Q) → (¬ P ∨ ¬ Q)

3.  (P → [Q → R]) → ([P → Q] → [P → R])