Due Wed, April 9th, at 11:59pm on Gradescope

Please show your work. Where it makes sense, your solutions should be written in full sentences. Recall that proof-writing problems will be graded on correctness as well as clarity and exposition.

From Enderton:

1. p. 7, Exercises 2, 3, 4

2. p. 9, Exercise 7

3. (proof-writing) p. 34, Exercise 35

Lewis Carroll puzzles In each of the following, you are given a list of statements, which are if-then statements built from basic statements. Use all of the statements to reach a logical conclusion, which should be an if-then statement. (For fun, try to make this conclusion a sentence in "ordinary language", which I realize is completely vague if you are a non-native English speaker.)

4. (a) No ducks waltz.
   (b) No officers ever decline to waltz.
   (c) All my poultry are ducks.

5. (a) No one takes in the Times unless he is well-educated.
   (b) No hedgehogs can read.
   (c) Those who cannot read are not well-educated.

6. (a) Animals, that do not kick, are always unexcitable.
   (b) Donkeys have no horns.
   (c) A buffalo can always toss one over a gate.
   (d) No animals that kick are easy to swallow.
   (e) No hornless animal can toss one over a gate.
   (f) All animals are excitable, except buffaloes.