You may work with other students in the class, but everyone should write up solutions independently.

1. (16 points) Exercise 1.c.g,k,l (Lemmon p. 18).
2. (6 points) Exercise 2.a (Lemmon p. 18).
3. (28 points) Exercise 1.b-h (Lemmon p. 27).
4. (6 points) Exercise 2.b (Lemmon p. 28).
5. (22 points) Law of non-contradiction. Prove the following sequent in our system:
   \[ \vdash \neg (P \& \neg P) \]
   (Hint: This is short and easy.)
6. (22 points) Law of the excluded middle. Prove the following sequent in our system:
   \[ \vdash P \lor \neg P \]
   (Hint: If you are stuck, consider the previous exercise and p. 38 of Lemmon.)

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Date: Due on Wednesday, January 27.