I Test #1 Mon 9/17/07.

II Cont. §1.3, p. 33: Deductive Arg. Forms.

A Categorical Syllogism.

1 What makes a Syllogism Categorical?
   Ans: All 3 statements look like:

   (a) All ___ are ___ A-statement
   (b) No ___ are ___ E - "
   (c) Some ___ are ___ I - 
   (d) Some ___ are not ___ O - "

(4) Or can be rephrased as...

   Fill in the blanks w/a noun or noun phrase.

   2 Example: All mammals are animals.
      All dogs are mammals.
      All dogs are animals.

      Form: All S are P. Barbara
      All S are M.
      All M are P.

B Hypothetical Syllogism (At least one of the stmts
   is a conditional stmt.)

1 Modus ponens (MP) "PONENS"

   If A, then C.
   \[ \frac{A}{C} \quad (A \text{ is true}) \]

   \[ \frac{C}{C} \quad (C \text{ is true}) \]

2 Modus tollens (MT)

   If A, then C.
   Not C.
   Not A.

3 Pure Hypothetical Syllogism (HS)

   If A, then B.
   If B, then C.
   If A, then C.

4 All three of the Hyp. Syls above are valid in form.

5 2 invalid forms.

   2 Denying the Antecedent (DA)

      If A, then C.
      Not A.
      Not C. \[ A \text{ frog is not dissected.} \]
      \[ A \text{ frog is not dead.} \]

   1ii Affirming the Consequent (AC)

      If A, then C.
      C.
      A.
      \[ A \text{ frog was dissected.} \]

<< After Class >>

You should work: §1.3: P.37: I: #1, 4, 7, 10, 13, 16, 25;
II (p.40) All III All.