

English 7, Fall 2006

Quiz: Conditionals and Conjunctions

(Answer Key on Page Two)

1. I'm not tired only if I sleep well. I am tired, so ...
 - a. I will sleep well.
 - b. I didn't sleep well.
 - c. No valid conclusion: negating the antecedent.
 - d. No valid conclusion: affirming the consequent.
 - e. No valid conclusion: negating the consequent.

2. If I don't sleep well, then I'm not tired. I am tired, so ...
 - a. I didn't sleep well.
 - b. I will sleep well.
 - c. No valid conclusion: negating the antecedent.
 - d. No valid conclusion: affirming the consequent.
 - e. No valid conclusion: affirming the antecedent.

3. You'll do well on the test only if you get most of the questions right on this quiz. Which of the following creates a valid argument with that conditional?
 - a. You do well on the test, so you got most of the questions on the quiz right.
 - b. You don't do well on the test, so you didn't get most of the questions on the quiz right.
 - c. You get most of the questions on the quiz right, so you do well on the test.
 - d. You don't get most of the questions on the quiz right, so you do well on the test.
 - e. None of the above creates a valid argument with that conditional.

4. You'll do well on the test if you get most of the questions right on this quiz. Which of the following creates a valid argument with that conditional?
 - a. You don't do well on the test, so you didn't get most of the questions on the quiz right.
 - b. You get most of the questions on the quiz right, so you don't well on the test.
 - c. You do well on the test, so you got most of the questions on the quiz right.
 - d. You don't get most of the questions on the quiz right, so you don't do well on the test.
 - e. None of the above creates a valid argument with that conditional.

5. If either Socrates or Crito agree, then they'll flee Athens and go into hiding. What can you conclude if they don't go into hiding?
 - a. They flee Athens.
 - b. They don't flee Athens.
 - c. Neither of them agreed.
 - d. One or the other didn't agree.
 - e. None of the above is a valid conclusion for that argument.

6. If Socrates and Crito agree, then either they'll flee Athens or they'll go into hiding. What can you conclude if they don't go into hiding?
 - a. Neither of them agreed.
 - b. One or the other didn't agree.
 - c. They flee Athens.
 - d. They don't flee Athens.
 - e. None of the above is a valid conclusion for that argument.

Answer Key

1. The conditional is “If tired, then sleep well,” so “tired” would be affirming the antecedent, and the valid conclusion would be “sleep well.”
2. The conditional is “if not sleep well, then not tired,” so “tired” would be negating the consequent, and the valid conclusion would be “sleep well.”
3. The conditional is “if do well then get most right.” A valid second premise would either affirm the antecedent (do well) or negate the consequent (not most right). A and D have those second premises, but the conclusion in D doesn’t negate the antecedent, while the conclusion in A does affirm the consequent, so A is the right answer.
4. The conditional is “if get most right then do well.” A valid second premise would either affirm the antecedent (most right) or negate the consequent (not do well). A and B have those second premises, but the conclusion in B doesn’t affirm the consequent, while the conclusion in A does negate the antecedent, so A is the right answer.
5. We can either affirm ONE of Socrates or Crito agreeing (because of the “or” – affirm one, negate all), or we can negate ONE of Athens or hiding (because of the “and” – affirm all, negate one). Here, we have negated the one (“not hiding”) meaning we can conclude “NOT (Socrates or Crito agree)” or “Socrates didn’t agree AND Crito didn’t agree.” So the answer is “neither of them agreed,” or C.
6. We can either affirm BOTH Socrates and Crito agreeing (because of the “and” – affirm all, negate one), or we can negate BOTH of Athens and hiding (because of the “or” – affirm one, negate all). Here, we have negated only one (“not hiding”) meaning we cannot conclude anything, since we haven’t negated the whole consequent. So the answer is E.