

Phil. 110: Intro to Logic & Crit. Thinking Pretest 3 Spring 06

I. (10 points). Fill in the blank with the appropriate term or phrase.

1. According to the square of opposition, an A statement implies the corresponding _____ proposition.
2. 'Bob is a student' is not a sentence in standard categorical form but it is best translated as an _____ categorical statement.
3. An E categorical proposition is logically equivalent to its _____ .
4. An A statement distributes its _____ term.
5. If you obvert a categorical statement with form I, the resulting statement is of form _____ .

II. (18 points). If 'All roads lead to Rome' is true, what may we validly deduce about the truth values of each of the following statements?

Make your verdicts explicit.

1. No roads lead to Rome.
2. Only roads lead to Rome.
3. Some roads lead to Rome.
4. Anything that doesn't lead to Rome is no road.

III. (14 points). Make That Move. For each of the following, "make that move", by providing the justificatory steps that lead from the first proposition to the

second. You are to use the operations on categorical sentences and the relations in the square of opposition. (Warning: It's possible that some of the moves can't be made; if you find such a case, mark it as such explicitly).

1. No C are nonS. Therefore, some S are nonC.

2. Some H are nonR. Therefore, some nonR are not nonH.

3. No S are R. Therefore, some nonR are not nonS.

IV. (20 points). Translate the following boldface claim into an appropriate categorical sentence and then use your freshly made categorical sentence to answer (b) thru (e) below. Be sure to say what your term letters stand for:

- (a) Only shallow people know themselves
- (b) form the contradictory of (a);
- (c) form the contrary of (a);
- (d) form the obverse of (a);
- (e) form the converse of (a);
- (f) Say which of (b) thru (e) is logically equivalent to (a).

V. (24 points). Test each of the following syllogisms for validity. Test the first by means of our rules, the second by Venn diagram and the third by any test you like (rules, Venn or the anitlogisim test). Also, provide the mood and figure for each argument. Make your verdict about validity explicit.

1. All lions are fierce. Some lions do not drink coffee. Therefore, some creatures that drink coffee are not very fierce.

2. Some logicians are not cheaters, since all logicians are golfers and no golfers are cheaters.

3. There are mice that aren't prolific. No mice are nonrodents. Thus, there are some rodents that are nonprolific.

VI. (14 points). For each of the following enthymemes, turn it into a standard form syllogism by translating the statements into standard categorical form and then supply the missing premise or conclusion to get a valid syllogism. Also, provide the mood and figure of the resulting syllogism.

1. Some lawyers are not honest because honest people do not shade the truth.

2. Since life is short, it must be lived to the fullest.