PHIL 242 & 80-208 Fall 2013 | Northwestern University & Carnegie Mellon University

Introduction to Logical Reasoning

Workshop #1: Statement Classification (Solutions)

Part I: Each of the following problems presents a single statement. For each, indicate whether it is a simple or a compound statement. If it is simple, indicate whether it is negative or positive. If it is compound, indicate whether is it conjunctive, disjunctive, hypothetical, or some combination of these. Do not forget to indicate the type of simple statements that are involved for the compound ones. These problems should be fairly straightforward.

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1. The computer scientists love logic.

Simple [1] positive [1].

2. Either the journalism or the business students love logic.

Compound [1] disjunctive [1], where First disjunct is simple [1] positive [1], and Second disjunct is simple [1] positive [1].

Correct use of the word "disjunct" [1].

3. The journalism students do not write boring articles.

Simple [1] negative [1].

4. If the journalism students love logic, then the business students are confused.

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Compound [1] hypothetical [1], where
The antecedent [1] is simple [1] positive [1], and
The consequent [1] is simple [1] positive [1].
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5. The computer scientists do not like illogical things and the journalism students love to expose illogical thinking in governmental officials.

Compound [1] conjunctive [1] ("and"), where

The first conjunct is simple [1] negative [1] ("not"), and The second conjunct is simple [1] positive [1].

Correct use of the word "conjunct" [1].

Workshop #1: Statement Classification (Solutions)

Part II: Each of the following problems presents a single statement. For each, indicate whether it is a simple or a compound statement. If it is simple, indicate whether it is negative or positive. If it is compound, indicate whether is it conjunctive, disjunctive, hypothetical, or some combination of these. Do not forget to indicate the type of simple statements that are involved for the compound ones. Some of these problems may require more thought.

1. The journalism students will confuse the business students, unless the business students are clever.

Compound [1] disjunctive [1], where The first disjunct is simple [1] positive [1], and The second disjunct is simple [1] positive [1].

Correct use of the word "disjunct" [1].

2. If both the journalism and the business students sleep through logic, then the professor will not talk quietly.

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Compound [1] hypothetical [1], where
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The antecedent [1] is compound [1] conjunctive [1], where The first conjunct is simple [1] positive [1], and The second conjunct is simple [1] positive [1]; and The consequent [1] is simple [1] negative [1].

Correct use of the word "conjunct" [1].

3. If either the journalism students work for Al Jazeera or the communication students win Academy Awards, then the business students will transfer to Northwestern while the computer scientists will be jealous.

Compound [1] hypothetical [1], where

The antecedent [1] is compound [1] disjunctive [1], where The first disjunct is simple [1] positive [1], and The second disjunct is simple [1] positive [1]; and The consequent [1] is compound [1] conjunctive [1], where The first conjunct is simple [1] positive [1], and The second conjunct is simple [1] positive [1].

Correct use of the words "disjunct" [1] and "conjunct" [1].

4. Study logic every night and you will get a good grade.

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Compound [1] hypothetical [1] ("and"), where
The antecedent [1] is simple [1] positive [1], and
The consequent [1] is simple [1] positive [1].
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