## Logic Homework – Day Two

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## 1 Day Two — pp. 41-62

Section 1.4. I: 2, 3, 6. II: 3, 8, 11. III: 11, 12, 15. Section 1.5. I: 2, 6, 8, 11. II: 3, 6.

1.4. I: 2. Valid. True premises and conclusion. Sound.

1.4 I: 3. Invalid. Unsound.

1.4 I: 6. Valid. Sound.

1.4 II: 3. Strong. False premises. Not cogent.

1.4 II: 8. Strong. True premises. Cogent.

1.4 II: 11. Strong. False premises. Not cogent.

1.4 III: 11. Inductive. Weak.

1.4 III: 12. Deductive. Invalid.

1.4 III: 15. Inductive. Strong.

1.5. I: 2. Some H are not F. No F are G. Therefore, some G are not H.

Some humans are not cyclists. No cyclists are legless people. Some legless people are not humans.

1.5 I: 6. All S are A. All S are M. All M are A.

All students are enrolled in college. All students are humans. All humans are enrolled in college.

1.5 I: 8. Some T are H. Some H are U. Some T are U.

Some smart people are women. Some women are not smart people. Some smart people are not smart people.

1.5 I: 11. All S are U. Some B are not S. Some U are B.

All smart people are geniuses. Some dumb people are not smart people. Some geniuses are dumb people.

1.5 II: 3. If H, then C. If E, then C. Thus, if H, then E.

If the Bears score more points than their opponents, then they don't lose. If the Bears don't play, then they don't lose. Thus, If the Bears score more points than their opponents, then they don't play.

1.5 II: 6. Some W are C. Some W are H. Some W are CH.

Some men are tall. Some men are short. Some men are tall and short.