Exercises for Reading 2.05

_____ Exercises Part I. Peruse the entire chapter. Then read the introductory section at the very beginning of the chapter. Read this section carefully and try to understand it as best you can.

What do we learn in this chapter?
 How to translate ordinary statements
 into logical propositions so we can analyze them using the principles we have learned.

2. Why do ordinary sentences need to be translated in order to become logical statements?

People don't usually speak or write in standard argument form. While presented informally, often the content is a categorical claim. To understand and to work with the propositions, they need to be formalized.

Read "What a Statement Needs in Order to be Logical." Read it carefully.

3. List the components which a logical proposition should have. Subject, predicate, quantifier, copula, and sometimes a complement.

Read sections concerning Rules A-D. Read them carefully.

4. Rewrite the following sentences using Rules A, B, C and D. Indicate which rules you used with each one.

Abortion should be illegal
All abortions are things that should be illegal. A, B, C, D

A society that loses its moral bearings seldom survives Some societies that lose their moral bearings are things that don't survive. A, B, C, D

Giving trade privileges to countries that violate human rights is wrong All giving of trade privileges to countries that violates human rights is something that is wrong. A, B, C

Television viewing is harmful to your health All television viewing is something that is harmful to your health. A, B, C

5. Think of three sentences similar to the ones used in the discussion of Rule A, B, C and D (try to think of simple sentences with as few words as possible) and apply these three rules (circle the subject and write **S**; circle the predicate and write **P** in each one of your sentences) and then write out the statement in its proper logical form.

It's impossible to bake a cake.

No cake is something that can be baked.

People shouldn't litter.

No person is one who should litter.

The logic exercises are getting harder.

All logic exercises are things that are getting harder.

Exercises Part 2. Read section titled "Rule E: Change Exclusive Sentences into A Statements." Read it carefully.

6. Explain Rule E in your own words.

I don't know why, but this is one of the most difficult rules for people to understand. It requires TWO steps.

- 1. Drop only and add all.
- 2. Switch the positions of the terms.

Read: "Rule F: Change Negative Sentences into E or O Statements." Read it carefully.

7 Explain Rule F in your own words.

Whenever the sentence contains a negative, we know it must be either an E or O statement. The trick is determining whether the original intent is universal or particular.

In order to be in standard form, the new sentence must be either:

No ____ are ____ , or Some ____ are not _____

8. Rewrite the following sentences using Rules A, B, C, D, E .and F

Guns do not cause crime

No guns are things that cause crime.

Only people who haven't read the Consititution believe that it prohibits prayer in schools.

All who believe the Constitution prohibits prayer in schools are people who haven't read the Constitution.

No one really believes animals have the same rights as humans No person is one who believes that animals have the same rights as humans.

No country that pollutes its environment can survive

No country that pollutes its environment is a country that can survive.

Without foreign aid from the United States many countries could not feed their own people

Some countries without foreign aid from the U.S. are countries that could not feed their own people.

- 9. Think of three commonly used sentences (try to think of simple sentences with as few words as possible) and apply these five rules you have learned (circle the subject and write *S*; circle the predicate and write *P* in each one of your sentences) and then write out the statement in its proper logical form.
- 1. Only people who live on farms really understand where our food comes from.

 All people who understand where our food comes from are people who live on farms.
- Bananas and ketchup do not go together.No banana is a thing that is served with ketchup.
- Most students don't cheat.

Some students are not cheaters.

_____ Exercises Part 3. Read: "Rule G: Change Exceptive Sentences into E or A Statements." Read it carefully.

10. Explain Rule G in your own words.

A sentence containing *except or similar* must be changed into two sentences. One will be an A and one will be an E. In a syllogism, pick one to be the premise, but not both. Either way, the syllogism will be valid.

(Not required, but here are three examples)

1. Everyone may enter except those without shoes.

No people without shoes are those who may enter. All who have shoes are those who may enter.

2. Every major league team is from the United States, except the Blue Jays.

All MLB teams that are not from the United States are the Blue Jays. No Blues Jays teams are from the United States.

3. Everyone played, except Bob, who broke his trombone.

All who were not Bob, who broke his trombone, are people who played. No people who played are Bob, who broke his trombone.

Read: "Rule H: Sentences Containing anyone, anything, whoever, the, if ... then or whatever Should be translated into A statements." Read it carefully.

11. Explain Rule H in your own words.

Words like *anyone*, *anything*, *etc*. refer to all. Conditional terms like *if* indicate a condition that can be translated into a A statement.

- 12. Think of three sentences similar to the ones used in this section of the book and apply Rule H.
- 1. If it's a horse, then it's an animal. All horses are animals.
- 2. Anyone who passes logic will be a better thinker. All who pass logic are better thinkers.
- 3. The person who thinks for themselves is better off.
 All who think for themselves are those who are better off.

Read: "Rule I: Sentences Containing someone, something, there is, or there are Should be translated into I statements." Read it carefully.

13. Explain Rule I in your own words.

Words containing particular indicators, like <u>some</u>one, <u>something</u>, <u>a</u> thing, or <u>things</u> should be translated into I statements.

- 14. Think of three sentences similar to the ones used in this section of the book and apply Rule I.
- 1. Someone is late for class. Some person is one who is late for class.

- 2. There is something blocking the driveway. Some object is an item blocking the driveway.
- 3. Something fell off the table. Some object is an item that fell off the table.
- 15. Rewrite the following sentences using all the rules you have learned:

Anyone who thinks welfare helps people doesn't know what he's talking about

No person who thinks welfare helps people is one who knows what he is talking about.

There is no good evidence that poverty causes crime No good evidence is evidence for poverty causing crime.

If public schools were doing a good job, there wouldn't be so many people homeschooling

All public schools that do a good job are schools that reduce homeschooling.

Whoever said that America is a melting pot never anticipated today's level of illegal immigration

All who said that America is a melting pot are those who never anticipated today's level of illegal immigration.

Someone should do something about size of government. Some people are those who should do something...

16. Think of three more commonly used sentences (try to think of simple sentences with as few words as possible) and apply these nine rules you have learned.

People who live in glass houses shouldn't throw stones.

No people who live in glass houses are people who should throw stones.

The unexamined life is not worth living (Socrates)

No unexamined life is a life worth living.

First come, first served.

All who come first are those who are first served.

Exercises Part 4

17. Rewrite the following sentences using all the rules you have learned:

"None but the brave deserve the fair."

All who deserve the fair are those who are brave.

"To everything there is a season."

All things are things that have a season.

"It is not uncommon for a musician to have perfect pitch" Some musicians are those who have perfect pitch.

"A foolish son is the sorrow of his mother"

All foolish sons are those who are the sorrow of his mother.

"No man has the right to be an amateur in the matter of physical training." – Socrates No man is one who has the right to be an amateur in the matter of physical training.

"Whoever works hard will succeed."

All who work hard are those who will succeed.

"Not every Democrat votes."

Some Democrats are not voters.

"All except human beings are non-symbolic animals"

No human beings are non-symbolic animals. All non-symbolic animals are not human beings.

Read section titled, "Summary." Read it carefully.

18. Tell whether the following are true or false:

- T F A quantifier is a form of the to be verb
- The complement is a word that links together a subject and a predicate.
- T F Exclusive sentences should be changed into A statements.
- T F An exceptive statement needs only a complement.
- **T** F The word all is a quantifier