

Exercises for Reading 2.02

_____ Exercises Part I. Peruse 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.

1. What are we discussing in this chapter?

The Mood in syllogisms.

2. Fill in the following chart [Review]:

First Figure (*sub-prae*)

M is the Subject (subject or predicate) in the *major* premise

M is the Predicate (subject or predicate) in the *minor* premise

3. Give the definition of *figure*.

Figure has to do with the *disposition or location* of terms in a syllogism.

4. Give the definition of *mood*.

Mood is the *disposition of the premises according to quantity and quality*.

5. How many figures are there?

Four

6. How many different moods are there?

16

7. If we say that a syllogism is in the mood AA what do we mean?

The first premise is an A statement and the second statement is an A statement.

8. If we say that a syllogism is in the mood EA what do we mean?

The first premise is an E statement and the second premise is an A statement.

9. Indicate the mood of the following syllogism (Include all three statements):

All mortals must die Mood: AAA

All men are mortal

Therefore, all men must die

≈

10. Indicate the mood of the following syllogisms (Include all three statements):

No men are immortal Mood: EAE

All angels are immortal

Therefore, no angels are men

_____ Exercises for Part 2. Read the section titled, "Figure and Mood." Read the entire section carefully.

12. Fill in the following chart [Review]:

Second Figure (*prae-prae*)

M is the Predicate (subject or predicate) in the *major* premise

M is the Predicate (subject or predicate) in the *minor* premise

13. Can syllogisms of the same mood be in different figures (Can there be, for example, an AA syllogism in the First and Second Figure)?

Yes

14. With sixteen different moods and four different figures, how many possible kinds of syllogisms are there?

64

15. Give one example of one whole mood that is invalid.

OOO

16. Of the 64 different kinds of syllogisms, how many are valid?

19

17. Fill in the following chart: [Review]

Third Figure (sub-sub)

M is the **Subject** (subject or predicate) in the **major** premise

M is the **Subject** (subject or predicate) in the **minor** premise

18. Explain why syllogisms with the mood **OO** are always invalid.

No conclusion can be drawn from two negative premises.

19. For each of the following arguments, (1) name the mood and figure of the syllogism, and (2) tell whether it is valid or not.

Example:

No saints are villains
Some robbers are not villains
Therefore, some robbers are saints

Some vegetables are not sweet
No vegetable is a fruit
Therefore, some fruits are not sweet

■ Mood and figure **EOI-2**

■ Valid ■ **Invalid**

■ Mood and figure **OEO-3**

■ Valid ■ **Invalid**

All floods are devastating___
No drought is a flood
Therefore, no drought is devastating___

All symphonies are beautiful
No opera is a symphony
Therefore, no opera is beautiful

■ Mood and figure **AEE-1**

■ Valid ■ **Invalid**

■ Mood and figure **AEE-1**

■ Valid ■ **Invalid**

All Protestants__ believe the trinity__
All Catholics__ believe the trinity__
Therefore, some Catholics__ are Protestants__

No maples__ are pines__
No oaks__ are pines__
Therefore, no oaks__ are maples__

■ Mood and figure **AAI-2**

■ Valid ■ **Invalid**

■ Mood and figure **EEE-2**

■ Valid ■ **Invalid**

No Greeks are Romans

No man is as wise as Solomon

Some soldiers are not Romans__
 Therefore, some soldiers are not Greeks__
 ■ Mood and figure **EOO-2**
 ■ Valid ■ Invalid

Einstein is a man
 Therefore, Einstein is not as wise as Solomon
 ■ Mood and figure **EAE-1**
 ■ Valid ■ Invalid

No tornadoes are pleasant
 Some violent storms are tornadoes
 Therefore, no violent storms are pleasant
 ■ Mood and figure **EIE-1**
 ■ Valid ■ Invalid

Some merry men are not in Sherwood Forest
 No sheriff is a merry man
 Therefore, no sheriff is in Sherwood Forest
 ■ Mood and figure **OEE-1**
 ■ Valid ■ Invalid

All Greeks are humans
 All Athenians are Greeks
 Therefore, All Athenians are humans
 ■ Mood and figure **AAA-1**
 ■ Valid ■ Invalid

All rabbits are very fast runners
 Some horses are very fast runners
 Therefore, some horses are rabbits
 ■ Mood and figure **All-2**
 ■ Valid ■ Invalid

20. Complete the following diagram by giving the form of each statement and showing whether each term is distributed or undistributed: [Review]

DIAGRAM OF THE DISTRIBUTION OF TERMS IN A, I, E, AND O STATEMENTS

<u>Type of sentence</u>	<u>Subject-Term</u>	<u>Predicate-Term</u>	<u>Categorical Statements</u>
A	Distributed	Undistributed	All S are P
I	Undistributed	Undistributed	Some S are P
E	Distributed	Distributed	No S are P
O	Undistributed	Distributed	Some S are not P

21. Think up your own syllogisms of the following forms (not examples used in the readings/exercises):

Example:

EIO-1:

- No dog is a cat
- Some animals are dogs
- Some animals are not cats

AAA-1:

·All cats chase mice
·All tabbies are cats
Therefore, all tabbies chase mice.

AAA-2:

·All cats chase mice.
·All tabbies chase mice.
·All tabbies are cats. (The conclusion is true, but it is an invalid form. Rule IV)

OAO-3:

·Some holsteins are not space travelers
·All holsteins are cows
·Some cows are not space travelers

AEE-4:

·All astronauts are space travelers.
·No space travelers are giraffes.
·No giraffes are space travelers.

EAE-1:

·No bird has a prehensile tail.
·Everything with a prehensile tail can grasp things with their tail.
·No bird can grasp things with its tail.

22. Tell whether the following are true or false:

- | | | |
|----------|----------|----------------------------------------------------------------------|
| T | F | Mood is the disposition of terms in a syllogism . |
| T | F | When it comes to the mood, the order of the premises does not matter |
| T | F | There are sixteen moods per figure. |
| T | F | |
| T | F | There are sixteen valid moods. |
| T | F | Syllogisms in the mood EE are always invalid. |