

Exercises for Reading 2.01

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

1. What are we discussing in this chapter?

Figure in syllogisms and how to identify them.

2. Explain what the word **figure** means as used in this chapter.

The figure of a syllogism is the disposition (or location) of terms in the premises

3. How many figures are there?

Four

4. What is **disposition**?

The location

Read section titled, "First Figure." Read it carefully.

5. What is the Latin term for a syllogism in the First Figure?

Sub-prae

6. How do we know a syllogism is in the First Figure?

The middle-term is the subject in the major premise and the predicate in the minor premise.

7. Fill in the following chart:

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

8. Show, using the symbols S, P and M, how a ***sub-prae*** syllogism is constructed.

M P

S M

9. Construct a ***sub-prae*** syllogism using different terms than the ones in the text.

All mammals are air breathing creatures

All horses are mammals.

Therefore, all horses are air breathing creatures.

_____ **Exercises Part 2. Read the section titled, "Second Figure." Read the entire section carefully.**

10. What is the Latin term for a syllogism in the Second Figure?

Prae-prae

11. How do we know a syllogism is in the Second Figure?

The middle term is the predicate of the major premise and is also the predicate of the minor premise.

12. Fill in the following chart:

Second Figure (prae-prae.)

M is the predicate in the major premise

M is the predicate in the minor premise

13. Show, using the symbols S, P and M, how a **prae-prae** syllogism is constructed.

P M

S M

14. Construct a **prae-prae** syllogism using different terms than the ones in the text.

No chickens are mallards

Some ducks are mallards

Therefore, some ducks are not chickens

Read: Section titled, "The Third Figure." Read it carefully.

15. What is the Latin term for a syllogism in the Third Figure?

Sub-sub

16. How do we know a syllogism is in the Third Figure?

The middle term is the subject in both the major and minor premises.

17. Fill in the following chart:

Third Figure (sub-sub)

M is the subject in the major premise

M is the subject in the minor premise

18. Show, using the symbols S, P, and M, how a **sub-sub** syllogism is constructed.

M P

M S

19. Construct a sub-sub syllogism using different terms than the ones in the text.
Some ducks are not white.
All ducks are birds.
Some birds are not white.

_____ Exercises Part 3. Read section titled "The Fourth Figure (Indirect First)." Read the entire section carefully.

20. What is the Latin term for a syllogism in the Fourth Figure?

Prae-sub

21. How do we know a syllogism is in the Fourth Figure?

The middle term is the predicate in the major premise and the subject in the minor premise.

22. Fill in the following chart:

Fourth Figure-Indirect First (*prae-sub*)

M is the predicate in the major premise

M is the subject in the minor premise

23. Show, using the symbols S, P, and M, how *prae-sub* syllogism is constructed.

P M

M S

24. Construct a *prae-sub* syllogism using different terms than the ones in the text.

All tigers are cats

No cats are mice

Therefore, No tigers are mice

25. Fourth Figure syllogisms are just another form of what?

Another form of the First Figure.

26. What is the Fourth Figure sometimes called?

The Galenic figure.

Read section titled, "How to Remember the Figures."

27. What is the Latin saying invented to help remember the figures.

Sub-prae prima, bis prae secunda, tertia sub bis.

28. What does this saying mean?

Sub-prae first, prae twice second, sub twice third

_____ **Exercises Part 4.**

29. Identify the terms, identify the position of the middle term and determine the figure of each syllogism:

No liberals are conservatives.
Allen is a conservative.
Therefore, Allen is not a liberal.

M = **prae** (*sub* or *prae*)

M = **prae** (*sub* or *prae*)

S: **Allen**
P: **liberal**
M: **conservative**

Fig: ■ First ■ **Second** ■ Third ■ Fourth

All Democrats are big spenders
President Obama was a Democrat
Therefore, President Obama was a big spender.

M = **sub** (*sub* or *prae*)

M = **prae** (*sub* or *prae*)

S: **President Obama**
P: **big spender**
M: **Democrat**

Fig: ■ **First** ■ Second ■ Third ■ Fourth

Some men are physicists
All physicists are brilliant
Therefore, some brilliant things are men.

M = **prae** (*sub* or *prae*)

M = **sub** (*sub* or *prae*)

S: **brilliant things**
P: **men**
M: **physicists**

Fig: ■ First ■ Second ■ Third ■ **Fourth**

No beggars can be choosers
That man is a beggar
Therefore, that man cannot be a chooser.

M = **sub** (*sub* or *prae*)

M = **prae** (*sub* or *prae*)

S: **that man**
P: **choosers**
M: **beggars**

Fig: ■ **First** ■ Second ■ Third ■ Fourth

No men are gods

M = **sub** (*sub* or *prae*)

All men are mortal
Therefore, some mortals are not gods

M = **sub** (*sub* or *prae*)

S: **__mortals**
P: **__gods**
M: **__men**

Fig: ■ First ■ Second ■ **Third** ■ Fourth

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

DISTRIBUTION

<u>Letter designation</u>	<u>Form (e.2. "All S is P")</u>	<u>Subject-Term</u>	<u>Predicate-Term</u>
A	All S is P	Distributed	Undistributed
E	No S is P	Distributed	Distributed
I	Some S is P	Undistributed	Undistributed
O	Some S is not P	Undistributed	Distributed

31. Indicate which figures the following syllogisms are in:

All dogs bark
Rover is a dog
Therefore, Rover barks

■ **First** ■ Second ■ Third ■ Fourth

All bees sting
All stinging things should be avoided
Therefore, bees should be avoided.

■ First ■ Second ■ Third ■ **Fourth**

No horse can fly
Pegasus is a horse
Therefore, Pegasus cannot fly

■ **First** ■ Second ■ Third ■ Fourth

All music is of some value
Some music is classical music
Therefore, some classical music is of some value

■ First ■ Second ■ **Third** ■ Fourth

32. Think up your own syllogism for each of the four figures.

First:

**All disciplined people are brilliant
All logic students are disciplined people**

Therefore, All logic students are brilliant

Second:

All logic students are disciplined

Some crazy people are not disciplined

Therefore, some crazy people are not logic students

Third:

Some trains are for passengers

All trains are transportation

Therefore, some transportation is for passengers

Fourth:

No fast food joints are fancy places

Some fancy places are restaurants

Some restaurants are not fast food joints

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

33. Tell whether the following are true or false:

- | | | |
|----------|----------|---|
| T | F | We label a First Figure syllogism <i>sub-prae</i> . |
| T | F | The Third Figure is really just a form of the First Figure. |
| T | F | <i>Prae-prae</i> is short for the Latin <i>praedicatum-praedicatum</i> . |
| T | F | In a syllogism of the Second Figure, the major term is the subject in the major premise and the predicate of the minor premise. |
| T | F | The figure of a syllogism is the disposition of terms in the conclusion. |
| T | F | The Fourth Figure is sometimes called the Galenic figure. |