

Exercises for Reading 9

_____ Exercises, Part I • Peruse the entire chapter. 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?
2. Describe each of the seven rules for the validity of syllogisms. [Review]
3. How many of these rules does a syllogism have to comply with in order to be considered valid? [review]
4. Which three of these rules do we discuss in this chapter?
5. Why are these rules called *qualitative* rules?
6. With what does a statement's quality have to do?
7. What are the three terms contained in a syllogism? [Review]
8. Explain how to distinguish the major, minor and middle terms. [Review]
9. In a syllogism, which premise is the minor premise? [Review]
10. In a syllogism, which premise is the major premise? [Review]
11. Fill in the following diagram showing which terms are distributed and which undistributed in different kinds of categorical statements, by writing distributed or undistributed in the blanks:

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	_____	_____	_____
I	_____	_____	_____
E	_____	_____	_____
O	_____	_____	_____

_____ Exercises, Part 2. Read "Rule V: No Conclusion Can Follow from Two Negative Premises."

12. What is Rule V?
13. What does this rule prevent us from trying to do?
14. Syllogisms that violate Rule V are said to commit what fallacy?
15. Indicate which Rule is violated in the following syllogisms. Indicate minor, major and middle terms

(S, P and M) and whether the terms are distributed or undistributed (d and u) to help determine if Rule V is violated. If no fallacy is committed, then simply mark it valid:

No saints__ are villains__
Some robbers__ are not villains__
Therefore, some robbers__ are saints__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V

Some vegetables__ are not sweet__
No vegetable__ is a fruit__
Therefore, some fruits__ are not sweet__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V

All floods__ are devastating__
No drought__ is a flood__
Therefore, no drought__ is devastating__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V

All symphonies__ are beautiful__
No opera__ is a symphony__
Therefore, no opera__ is beautiful__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V

All Protestants__ believe the trinity__
All Catholics__ believe the trinity__
Therefore, some Catholics__ are Protestants__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V

No maples__ are pines__
No oaks__ are pines__
Therefore, no oaks__ are maples__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V

No Greeks__ are Romans__
Some soldiers__ are not Romans__
Therefore, some soldiers__ are not Greeks__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V

No man__ is as wise as Solomon__
Einstein__ is a man__
Therefore, Einstein__ is not as wise as Solomon__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V

No tornadoes__ are pleasant__
Some violent storms__ are tornadoes__
Therefore, no violent storms__ are pleasant__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V

Some merry men__ are not in Sherwood Forest__
No sheriff__ is a merry man__
Therefore, no sheriff__ is in Sherwood Forest__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V

_____ Exercises Part 3. Read the section titled, "Rule VI: If the Two Premises are Affirmative the Conclusion Must Also be Affirmative."

16. Explain Rule VI.

17. Syllogisms that violate Rule VI are said to commit what fallacy?

18. Indicate which of the six rules is violated in the following syllogisms. Indicate minor, major, and middle terms (S, P, and M) and whether the terms are distributed or

undistributed (d and u) to help determine which rules are violated. If no fallacy is committed, then simply mark it valid:

All mermaids__ can swim__
Some nymphs__ are mermaids__
Therefore, some nymphs__ are not swimmers__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V
■ Rule VI ■ Valid

All teeth__ are white__
A molar__ is a tooth__
Therefore, a molar__ is white__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V
■ Rule VI ■ Valid

All revolutions__ are bloody__
No election__ is bloody__
Therefore, no election__ is a revolution__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V
■ Rule VI ■ Valid

All jesters__ are clowns__
All clowns__ are funny__
Therefore, some funny people__ are not jesters__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V
■ Rule VI ■ Valid

All archers__ are foresters__
All foresters__ are merry men__
Therefore, some merry men__ aren't archers__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V
■ Rule VI ■ Valid

All military leaders__ are male__
Joan of Arc__ is not a male__
Therefore, Joan of Arc__ is not a military leader__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V
■ Rule VI ■ Valid

No boys__ are rude__
No girls__ are boys__
Therefore, no girls__ are rude__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V
■ Rule VI ■ Valid

All Romans__ are brave__
Some Gauls__ are not Romans__
Therefore, some Gauls__ are not brave__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V
■ Rule VI ■ Valid

All queens__ are regal__
Elizabeth__ is a queen__
Therefore, Elizabeth__ is regal__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ Rule V
■ Rule VI ■ Valid

All moons__ are spherical__
All moons__ revolve__
Therefore, all things that revolve__ are spherical__
■ Rule I ■ Rule II
■ Rule III ■ Rule IV ■ V
■ Rule VI ■ Valid

All oaks__ are trees__
All trees__ are alive__
Therefore, some living things__ are not oaks__

All beagles__ are dogs__
All dogs__ are loyal__
Therefore, some loyal things__ aren't beagles__

- | | | | |
|------------|-----------|------------|-----------|
| ■ Rule I | ■ Rule II | ■ Rule I | ■ Rule II |
| ■ Rule III | ■ Rule IV | ■ Rule III | ■ Rule IV |
| ■ Rule VI | ■ Valid | ■ Rule VI | ■ Valid |

_____ **Exercises Part 4. Read “Rule VII: If Either Premise is Negative, the Conclusion Must be Negative.”**

19. Indicate which Rule is violated in the following syllogisms. Indicate minor, major, and middle terms (S, P, and M) and whether the terms are distributed or undistributed (d and u) to help determine which rules are violated. If no fallacy is committed, then simply mark it valid.

- | | |
|---|--------------------------------------|
| Some fairies__ are not leprechauns__ | All teeth__ are white__ |
| All leprechauns__ are green men__ | All teeth__ are molars__ |
| Therefore, some green men__ are fairies__ | Therefore, some molars__ are white__ |
| ■ Rule I | ■ Rule I |
| ■ Rule II | ■ Rule II |
| ■ Rule III | ■ Rule III |
| ■ Rule IV | ■ Rule IV |
| ■ Rule V | ■ V |
| ■ Rule VI | ■ Rule VI |
| ■ Rule VII | ■ Rule VII |
| ■ Valid | ■ Valid |

- | | |
|--|-------------------------------------|
| No revolutions__ are bloody__ | No oaks__ are pines__ |
| All elections__ are bloody__ | Some trees__ are oaks__ |
| Therefore, no election__ is a revolution__ | Therefore, some trees__ are pines__ |
| ■ Rule I | ■ Rule I |
| ■ Rule II | ■ Rule II |
| ■ Rule III | ■ Rule III |
| ■ Rule IV | ■ Rule IV |
| ■ Rule V | ■ V |
| ■ Rule VI | ■ Rule VI |
| ■ Rule VII | ■ Rule VII |
| ■ Valid | ■ Valid |

- | | |
|---|--|
| No noble thing__ is revered__ | No hawks__ are warblers__ |
| All heroes__ are revered__ | Some birds__ are hawks__ |
| Therefore, no hero__ is a noble thing__ | Therefore, some birds__ are warblers__ |
| ■ Rule I | ■ Rule I |
| ■ Rule II | ■ Rule II |
| ■ Rule III | ■ Rule III |
| ■ Rule IV | ■ Rule IV |
| ■ Rule V | ■ V |
| ■ Rule VI | ■ Rule VI |
| ■ Rule VII | ■ Rule VII |
| ■ Valid | ■ Valid |

20. Tell whether the following are true or false.

- | | | |
|---|---|---|
| T | F | If there are more than three terms in a syllogism, then the syllogism violates Rule III. |
| T | F | If a syllogism has at least one affirmative premise, the conclusion must be affirmative. |
| T | F | The Fallacy of Illicit Minor occurs when the minor term is distributed in the conclusion but not in the premises. |

- T F The middle term must be distributed at least once.
- T F No conclusion can follow from two negative premises.
- T F The minor term must be universal in both the conclusion and the premises.