# Table of Contents

Introduction ............................................................................................................................. 5  
Chapter 1 ................................................................................................................................ 6  
Chapter 2 ................................................................................................................................ 7  
Chapter 3 ................................................................................................................................ 9  
Chapter 4 ................................................................................................................................ 10  
Chapter 5 ................................................................................................................................ 12  
Chapter 6 ................................................................................................................................ 14  
Chapter 7 ................................................................................................................................ 15  
Chapter 8 ................................................................................................................................ 17  
Chapter 9 ................................................................................................................................ 19  
Chapter 10 ............................................................................................................................. 22  
Chapter 11 ............................................................................................................................. 25  
Chapter 12 ............................................................................................................................. 27  
Chapter 13 ............................................................................................................................. 30  
Chapter 14 ............................................................................................................................. 33  

## QUIZZES & FINAL EXAM KEY

<table>
<thead>
<tr>
<th>Quiz Type</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction Quiz</td>
<td>36</td>
</tr>
<tr>
<td>Chapter 1 Quiz</td>
<td>37</td>
</tr>
<tr>
<td>Chapter 2 Quiz</td>
<td>38</td>
</tr>
<tr>
<td>Chapter 3 Quiz</td>
<td>39</td>
</tr>
<tr>
<td>Chapter 4 Quiz</td>
<td>41</td>
</tr>
<tr>
<td>Chapter 5 Quiz</td>
<td>42</td>
</tr>
<tr>
<td>Chapter 6–7 Quiz</td>
<td>44</td>
</tr>
<tr>
<td>Chapter 8 Quiz</td>
<td>45</td>
</tr>
<tr>
<td>Chapter 9 Quiz</td>
<td>46</td>
</tr>
<tr>
<td>Chapter 10 Quiz</td>
<td>48</td>
</tr>
<tr>
<td>Chapter 11 Quiz</td>
<td>50</td>
</tr>
<tr>
<td>Chapter 12 Quiz</td>
<td>51</td>
</tr>
<tr>
<td>Chapter 13 Quiz</td>
<td>52</td>
</tr>
<tr>
<td>Final Exam</td>
<td>54</td>
</tr>
</tbody>
</table>
INTRODUCTION

Exercises for Day 1

1. Logic is the science of right thinking.
2. Aristotle
3. Chrysippus
4. Gottfried Wilhelm Leibniz
5. John Stuart Mill
6. Gottlob Frege, Alfred North Whitehead and Bertrand Russell
7. One is called formal or “minor” logic, the other material or “major” logic.
8. Formal logic is interested in the form or structure of reasoning.
9. Material logic is concerned with the content of argumentation. It deals with the truth of the terms and the propositions in an argument.
10. F (The purpose of formal logic is to lead us from one truth to another.)
    T (Formal logic is useful only if we already have truths to use logic with.)
    T
    F (Statements can only be true or false.)
    F (Arguments can only be valid or invalid.)

Exercises for Day 2

11. Truth is correspondence to reality.
12. We say an argument is valid when its conclusion follows logically from its premises.
13. The term soundness is used to indicate that all the premises in an argument are true and that the argument is valid.
14. T
    F (A sound argument must both be valid and have true premises.)
    T
    F (A valid argument need not be sound, since an argument can be valid but have false premises, disallowing it from being sound.)
    T
    F (An argument must contain two premises in traditional logic.)

Exercises for Day 3

15. All men are mortal  
    Socrates is a man  
    Therefore, Socrates is mortal

Exercises for Day 3


Exercises for Day 3
28. “All men are mortal”; “Socrates is a man”; and “Socrates is mortal.” (You do not have to include the word ‘therefore’ in the last proposition.)
29. A judgment.

__________ Exercises for Day 4

30. Deductive inference.
31. Syllogism.
32. A deductive inference occurs when we make the logical connections in our minds between the terms in the argument in a way that shows us that the conclusion either follows or does not follow from the premises. (or something similar)
33. Syllogism.

34. |
<table>
<thead>
<tr>
<th>Mental Act</th>
<th>Verbal Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Apprehension</td>
<td>Term</td>
</tr>
<tr>
<td>Judgment</td>
<td>Proposition</td>
</tr>
<tr>
<td>Deductive Inference</td>
<td>Syllogism</td>
</tr>
</tbody>
</table>

35. |
| Taking a step                            | Simple Apprehension |
| Picking up your foot                     | Deductive Inference |
| Walking from one place to another        | Judgment            |

CHAPTER 1

__________ Exercises for Day 1

1. First, we perceive something with our senses; second, we form an image of it in our mind; and, thirdly, we conceive its meaning.
2. The third: we conceive its meaning.
3. The first and second: perceiving something with our senses and forming an image of it in our minds.
4. The first: the perception of something with our senses.
5. Because the sense perception occurs in our minds, while the chair exists outside of our minds.
6. Sense perception is the act of seeing or hearing or smelling or tasting or touching.

__________ Exercises for Day 2

7. We form a mental image.
8. A mental image.
9. Because, while the sense perception lasts only as long as we are looking at the chair, the mental image can be present even when we are not perceiving the chair through our senses.
10. A mental image is the image of an object formed in the mind as a result of a sense perception of that object.
11. Simple apprehension.
12. Different.
13. Because, while a mental image is representative of something tangible and material (for example, it has shape and color), simple apprehension is the grasp of something intangible and immaterial.
14. Simple apprehension is an act by which the mind grasps the concept or general meaning of an object without affirming or denying anything about it.
15. Concept.
What is the definition of logic?
Logic is the science of right thinking.

What are the two main branches of logic?
1. formal or “minor” logic
2. material or “major” logic

Define the following terms:
1. Truth: correspondence to reality
2. Validity: when the conclusion follows logically from the premises
3. Soundness: when all the premises are true and the argument is valid

True/False Questions:
1. T F The purpose of formal logic is to discover truth.
2. T F A statement can be true or false.
3. T F An argument can be true or false.
4. T F A sound argument must be valid.
5. T F A valid argument must be sound.

Fill in the following chart. List the three acts of the mind involved in logic and their corresponding verbal expressions:

<table>
<thead>
<tr>
<th>Mental Act:</th>
<th>Verbal Expression:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Apprehension</td>
<td>Term</td>
</tr>
<tr>
<td>Judgment</td>
<td>Proposition (or statement)</td>
</tr>
<tr>
<td>Deductive Inference</td>
<td>Syllogism</td>
</tr>
</tbody>
</table>