



Essentials of Formal Logic with Joelle Hodge

Lesson 4: Chapter 2.1

Outline:

Chapter 2, Lesson 2.1

- A Brief History of Logic
 - Part 1: Aristotle gets the ball rolling.
 - Classical origins and medieval recovery
- Points to Remember
 - The Greek philosophers, particularly Aristotle, developed formal logic.
 - The rediscovery of logic was central to the rebirth of higher learning and the advancement of philosophy and science.
- **“It is the mark of an educated mind to be able to entertain a thought without accepting it.”** Aristotle
- Since the beginning of time, people have been interested in finding truth or **being certain** about what they know, or what they think they know.
- This is a process and a search for truth. They began to consider rules by which they might be able to determine if their reasoning was good or bad or their beliefs were true or false. In determining this, they believed it would aid them in analyzing their beliefs effectively.
- There is a direct line here between people having wonder, curiosity and pursuing discovery in philosophy. Somebody wondered, “Does the world make sense?”
- The basis of geometry is the postulate, or **axiom**, which is a truth that is accepted as a given.
 - They found in geometry and other reasoning processes they were using to discover the truth of the world around them.
- Aristotle was fascinated by all sorts of subjects including philosophy, politics, science, and medical studies.
- *A priori* (self-evident) truths are a little bit different from axioms. These are experiential truths that we know. The truth is manifest in the evidence.
 - We can’t limit ourselves to what we know based on our senses.
- The Stoics, third century BC, liked to study problems in logic such as the liar’s paradox. These are manipulations of rational thinking.
 - This paradox occurs when someone who has claimed that he always lies utters the phrase, “I am lying.”
- William of Ockham is a famous medieval logician.
- Thomas Aquinas (1225-1274) used Aristotle’s logic to develop arguments for the existence of God.