



Essentials of Formal Logic with Joelle Hodge

Lesson 1: Chapter 1.1

Outline:

Chapter 1, Lesson 1.1

- Always identify what the chapter says it's going to do, and what the lesson says it's going to do.
 - Chapter 1 is an introduction to formal logic.
 - Lesson 1.1 is about formal versus informal logic.
- Points to Remember
 - In this case this sets up Formal Logic and Informal Logic.
 - You will always find bullet points to quickly summarize and highlight information.
 - Don't rely on these bullet points alone.
- Read the text together and mark the text.
 - Logic is the art and science of reasoning.
 - The artistic side is the inductive side (informal logic).
 - The scientific side is the deductive side (formal logic).
 - Formal logic is reasoning in the abstract. Pre-algebra course is one where you have been introduced to reason in the abstract.
- Turn to Appendix A.
 - We will move away from concrete to assigning letters to argument to determine whether they are valid.
- There is a difference between truth and validity.
 - You could construct an argument with all true statements and the argument could be invalid.
 - You could have a well-constructed valid argument that can be false because it has false facts.
 - Separate yourself from thinking that all true facts always means a solidly constructed argument.
 - Learn to construct true facts in a valid construction to create a sound argument.
 - True premises plus a valid construction equals a sound argument.
- The conclusion must be true if the premises used to support it are true, if and only if the argument is constructed properly.
- Truth and validity works this way: if you mix up the parts of a house, the windows are still windows (even on the floor), but the construction is all off. This class will teach you about construction.
- All men are mortal. Socrates is a man. Therefore Socrates is mortal.



- This is the most famous syllogism.
 - We are concerned with the form of the argument.
 - We are going to begin with statements, called **propositions**.
- Dialectical logic is the language of debate and interchange of ideas between people.
- Always make a habit of referring to endnotes. Reading through the chapter helps solidify how to see the form that you are looking for.
 - Arguments can operate in a partial sense.
 - Talking in the universal can lead to some problems.
- Question 1: What is the most important, or fundamental difference between formal and informal logic?
 - Informal logic focuses on evaluating the weight of the evidence. Is it strong or weak?
 - Formal logic is really about construction to be guaranteed validity with certainty.
- Question 2: Why aren't very many symbols used in informal logic?
 - In informal logic we are talking about the ways people naturally express themselves. We are rarely talking about all of something, so it is difficult to have a symbol for every kind of fact.