



# Essentials of Formal Logic with Joelle Hodge

## Lesson 27: Chapter 7.5

### Outline:

#### Chapter 7, Lesson 7.5

- The Syllogism Introduced
- Moods and Figures
- Points to Remember
  - The **schema** of a syllogism is its pattern of organization identified by its mood and figure.
  - The mood of a syllogism refers to the combination and order of categorical propositions.
  - Figure is determined by the location of the middle term, designated *M* in the categorical syllogism. There are four possible combinations of middle term positions.
- Mood: A, E, I, O
  - Major Premise: All men are mortal.
  - Minor Premise: Socrates is a man.
  - Conclusion: Socrates is mortal.
  - This mood is an AAA syllogism.
  - 176 possible combinations of mood and figure. Only 19 are valid. There are 157 ways to make a bad argument.

### MOOD

Figure 1	AAA	EAE	AII	EIO		
Figure 2	EAE	AEE	EIO	AOO		
Figure 3	AII	LAI	AII	EAO	OAO	EIO
Figure 4	AAI	AEE	LAI	EAO	EIO	

- Figure: Appendix A
  - There are four possible middle term positions.

### FIGURE

	Figure 1		Figure 2		Figure 3		Figure 4	
Premise 1	<i>M</i>	<i>P</i>	<i>S</i>	<i>M</i>	<i>M</i>	<i>P</i>	<i>S</i>	<i>M</i>
Premise 2	<i>S</i>	<i>M</i>	<i>S</i>	<i>M</i>	<i>M</i>	<i>P</i>	<i>M</i>	<i>P</i>
Conclusion	<i>S</i>	<i>P</i>	<i>S</i>	<i>P</i>	<i>S</i>	<i>P</i>	<i>S</i>	<i>P</i>
MNEMONIC	↑	↑	↑	↑	↑	↑	↑	↑

*Major*  
*Minor*



- Use mood and figure to determine if you have a valid syllogism.
- Mood and figure form schema.
- Logicians in the Middle Ages wanted a way to remember all of the valid combinations of mood and figure, so they developed a memory device (a mnemonic).