Philosophy-111 Critical Thinking

And Writing:
The 15 Valid Syllogistic Forms

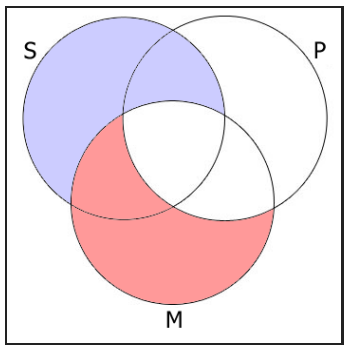
On this page students will find Venn Diagrams for all 15 valid standard form categorical syllogisms. This is the only internet site to publish the complete set of all Venn diagrams for the 15 valid forms. Everyone is welcome to NON COMMERCIAL use of them without special permission from me. 2006 Phil-111 student, Troy Lucero, is gratefully credited with the graphic images themselves. These are also printed, exclusively, in my textbook, ***Reason, Argue, Refute*** (click **Texts & Overview** on the right panel to order).

Students will find this resource valuable in fulfilling their essay and term paper assignments that require Venn diagrams in support of their formulated syllogisms.

In my commentary notes here students will notice interesting features of these 15 Venn Diagrams that help understand the underlying logical necessity of validity. For instance, since **E** and **I** propositional types have their CONVERSE true by immediate inference, Venn Diagrams where **E** and **I** can be converted result in isomorphic (from the Greek words for 'same form') Venn Diagrams as in CELARENT and CESARE. Each of the 4 Figures for the **EIO** Mood has isomorphic Venn diagrams as well.

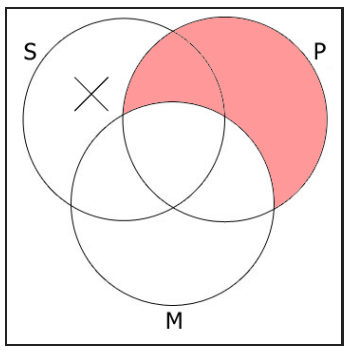
If you wish to formulate a valid argument with a UNIVERSAL AFFIRMATIVE conclusion from two UNIVERSAL AFFIRMATIVE premises, then you have only one choice out of the 15 valid forms. Click on each image for full view.

BARBARA, AAA-1
All M are P. All S are M. Therefore, All S are P.

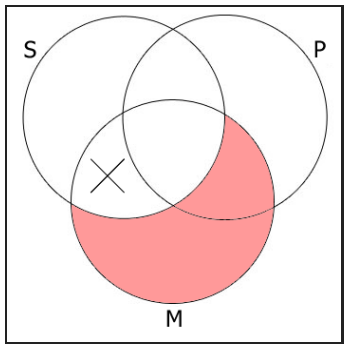


If you wish to formulate a valid argument with a UNIVERSAL NEGATIVE conclusion from a mix of AFFIRMATIVE/NEGATIVE and UNIVERSAL/PARTICULAR premises, the you have TWO to choose from.

BAROCO, AOO-2
All P are M. Some S are not M. Therefore, Some S are not P.

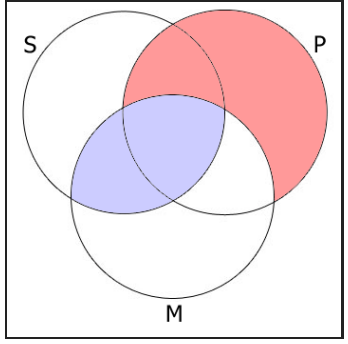


BOCARDO, OAO-3
Some M are not P. All M are S. Therefore, Some S are not P.

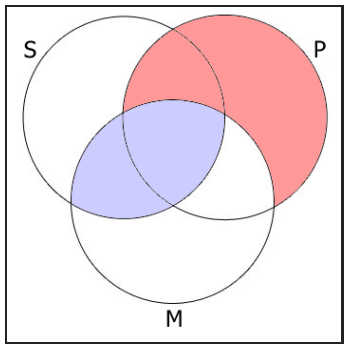


If you wish to formulate a valid argument with a UNIVERSAL NEGATIVE conclusion from ONLY universal premises (only one of which is affirmative), then you have four to choose from:

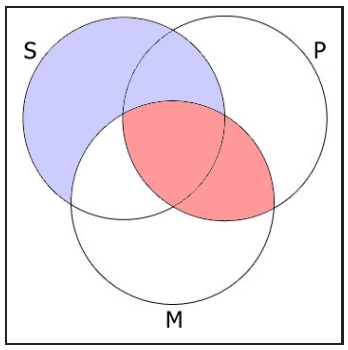
CAMENES, AEE-4
All P are M. No M are S. Therefore, No S are P.



CAMESTRES, AEE-2
(by converting the minor premise of CAMENES)
All P are M. No S are M. Therefore, No S are P.

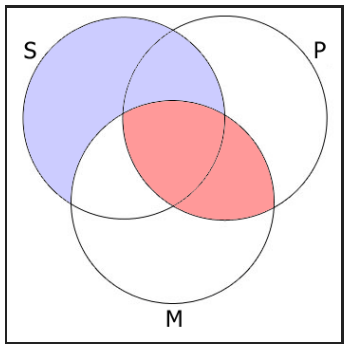


CELARENT, EAE-1
No M are P. All S are M. Therefore, No S are P.

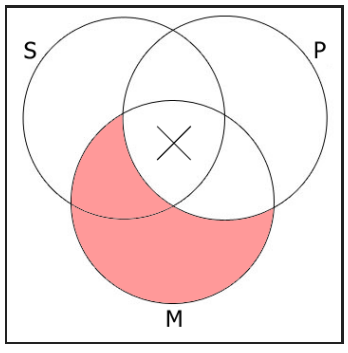


CESARE, EAE-2
(by Converting the major premise of CELARENT)
No P are M. All S are M. Therefore, No S are P.

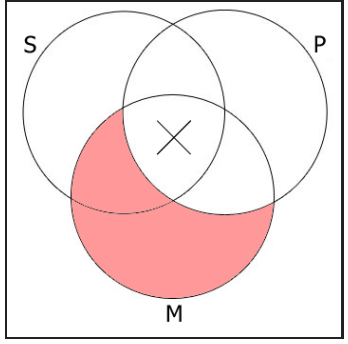
If you wish to derive a PARTICULAR AFFIRMATIVE conclusion from only AFFIRMATIVE premises using both UNIVERSAL AND PARTICULAR then choose from these four valid forms for your syllogism



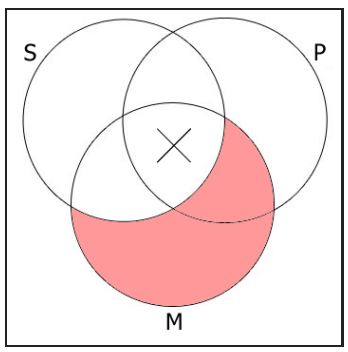
DARII, AII-1
All M are P. Some S are M. Therefore, Some S are P.



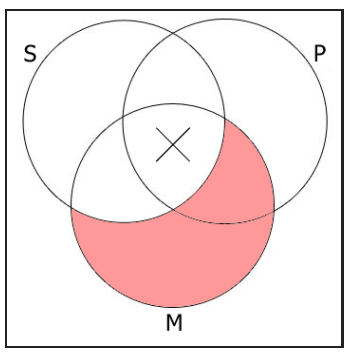
DATISI, AII-3
(by converting the minor premise of DARII)
All M are P. Some M are S. Therefore, Some S are P.



DISAMIS, IAI-3
Some M are P. All M are S. Therefore, Some S are P.

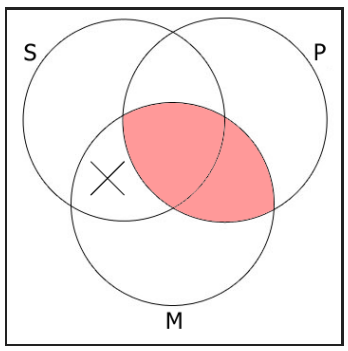


DIMARIS, IAI-4
(by converting the major premise of DISAMIS)
Some P are M. All M are S. Therefore, Some S are P.

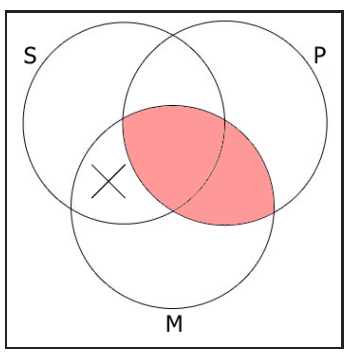


If you want to formulate an argument with a PARTICULAR NEGATIVE conclusion from one UNIVERSAL NEGATIVE and one PARTICULAR AFFIRMATIVE without worry about how the FIGURE of the MIDDLE TERM will affect your argument, then choose any MOOD & FIGURE of EIO arguments. Regardless of FIGURE, they are all valid. To understand why this is the case merely recall that only Type E and Type I propositions are valid immediate inferences by conversion.

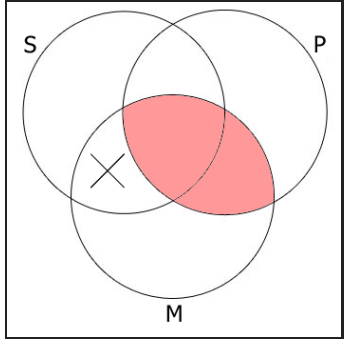
FERIO, EIO-1
No M are P. Some S are M. Therefore, Some S are not P.



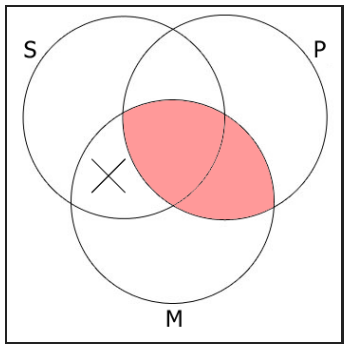
FESTINO, EIO-2
(by converting the major of FERIO)
No P are M. Some S are M. Therefore, Some S are not P.



FRESISON, EIO-4
(by converting the minor of FESTINO)
No P are M. Some M are S. Therefore, Some S are not P.



FERISON, EIO-3
(by converting the major of FRESISON)
No M are P. Some M are S. Therefore, Some S are not P.
(Note: Converting the minor of this syllogistic form, FRESISON will return you to FERIO)



Link to Power of Logic Site for Testing Venn diagrams
The **Power of Logic Web Tutor** is a free tutorial to accompany C. Stephen Layman's text, The Power of Logic. This internet-based study guide provides you with numerous ways to check your understanding of categorical syllogistic logic, and to independently check your work and receive feedback.

Link to Syllogism Evaluator
Master the skills of using Venn diagrams to test the validity of Categorical Syllogisms by using Syllogism Evaluator.