ARGUMENTS

An ARGUMENT is a collection of declarative sentences one of which is called the conclusion and the rest of which are called premises. Ordinarily, the premises are supposed to give us reasons for believing the conclusion (the conclusion follows necessarily from the premises).

An argument is VALID when, if all the premises are true, the conclusion MUST BE TRUE. Validity concerns LOGICAL STRUCTURE.

An argument is SOUND iff, in addition to being valid, it contains only true premises. Soundness is built upon the correct logical structure; it adds TRUE CONTENT of an argument.

An argument that is sound (and so also valid):
(1) All humans are mortal.
(2) Socrates is a human.
(3) Therefore, Socrates is mortal.

An invalid argument is this:
(1) John is a famous rock star.
(2) John drives a Porsche.
(3) Therefore, Porsches are the best cars.

An argument that is valid but unsound:
(1) The University of Colorado is in Boulder.
(2) Boulder is the capital of New York State.
(3) Therefore, Boulder is in New York State.
Though the structure is correct, premise (2) is false and so is the conclusion.

Not all arguments are neatly laid out for us to examine, with the premises first and the conclusion following. Sometimes they have an informal, conversational structure or even have premises (deliberately) hidden. Think of editorials you might read in the paper. Here's an example of this: "I don't think women should vote. Everybody knows how irrational women are." As it stands this does not even look like an argument, so we must RECONSTRUCT the argument proper from the sentences:

(1) It is a requirement of voters that they be rational.
(2) Women are not rational.
(3) Therefore, women do not qualify as voters.
(4) Therefore, women should not vote.

Notice that the preliminary conclusion (3) is used as a premise for the final conclusion of the argument. Arguments are often constructed of multiple sub-arguments in this way.