Introduction to Logical Reasoning *What is an Argument?*

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What is an Argument?

An argument is a collection of statements that are connected in a certain way. In particular, statements in an argument are linked together by inferences.

An **inference** affirms one statement on the basis of one or more other supporting statements. These supporting statements provide the *reasons* or *evidence* for believing the statement being affirmed.

Logic is hard because it involves a lot of symbols. Why is this an argument? What is the statement being defended? What reason is offered to defend that statement?

- Logic is hard **because** it involves a lot of symbols.
- This involves two simple positive statements:
 - 1. Logic is hard, and
 - 2. Logic involves a lot of symbols.
- The word "because" indicates that the second statement is supposed to provide a *reason* or *evidence* for us to believe that the first statement is true.

Logic is hard **because** it involves a lot of symbols.

Do not treat this sentence like a single compound statement. The statements in this sentence are connected by an inference ("because"); they are not connected in a way that is hypothetical ("if . . . then..."), conjunctive ("and"), or disjunctive ("or") in nature. This is the crucial difference between an argument and a compound statement.

Premise: A statement in an argument that is used to support another statement; it is the basis on which an inference is made.

Conclusion: A statement in an argument that the other statements support; it is the statement being affirmed by an inference.

Indicator Words

Common Premise Indicators

because	in view of the fact	assuming that
since	given that	for the reason that
for	seeing that	inasmuch as
as	due to the fact that	as indicated by
follows from	being that	the reason being
Common Conclusion Indicators		
therefore	which implies that	it must be that
thus	consequently	as a result

it follows that

we can conclude that

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hence

SO

which means that

ergo

Logic is hard because it involves a lot of symbols.

The conclusion indicator "because" helps us to understand which statement is the premise and which statement is the conclusion in this argument.

We can then parse this argument as follows:



Consider the following argument:

Philosophy teaches critical thinking skills, so students should take more philosophy classes. For critical thinking is essential to living a good life.

First, identify any indicator words:

Philosophy teaches critical thinking skills, <u>so</u> students should take more philosophy classes. For critical thinking is essential to living a good life.

Second, try to identify the conclusion:

Third, find the premises supporting that conclusion: Philosophy teaches critical thinking skills, so students should take more philosophy classes For critical thinking is essential to living a good life.



». What is an Argument?

An **argument** is a collection of statements about which the claim is made that the truth of all the premises entails the truth of the conclusion.

So an argument asserts that the conclusion can be inferred from the premises. That is, the claim is that *if* you accept the truth of the premises, then you must accept the truth of the conclusion as well.



We will look more closely at how to identify an argument's premises and conclusion when the statements involved are compound, while not being distracted by material not essential to the argument.

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