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1.1 WHAT IS AN ARGUMENT?

Logic is the study of arguments. An argument is a sequence of statements of which one is intended as a conclusion and the others the *premises*, are intended to prove or at least provide some evidence for the conclusion. Here are two simple examples:

All humans are mortal. Socrates is human. Therefore, Socrates is mortal.
 Albert was not at the party, so he cannot have stolen your bag.

In the first argument, the first two statements are premises intended to prove the conclusion that Socrates is mortal. In the second argument, the premise that Albert was not at the party is offered as evidence for the conclusion that he cannot have stolen the bag.

The premises and conclusion of an argument are always *statements* or *propositions*,¹ as opposed to questions, commands, or exclamations. A statement is an assertion that is either true or false (as the case may be) and is typically expressed by a declarative sentence.² Here are some more examples:

Dogs do not fly.
 Robert Muncie wrote *The Man Without Qualities*.
 Brussels is either in Belgium or in Holland.
 Snow is red.
 My brother is an entomologist.

The first three sentences express statements that are in fact true. The fourth sentence expresses a false statement. And the last sentence can be used to express different statements in different contexts, and will be true or false depending on whether or not the brother of the speaker is in fact an entomologist. By contrast, the following sentences do not express any statements:

Who is the author of *The Man Without Qualities*?
 Please do not call after 11pm.
 Come on!

Nonstatements, such as questions, commands, or exclamations are neither true nor false. They may sometimes suggest premises or conclusions, but they are never themselves premises or conclusions.

SOLVED PROBLEM

1.1 Some of the following are arguments. Identify their premises and conclusions.

- He's a Leo, since he was born at the first week of August.
- How can the economy be improving? The trade deficit is rising every day.

¹Philosophers sometimes draw a distinction between statements and propositions, but it is not necessary to make that distinction here.

²The distinction between a statement or proposition and the sentence used to express it is important. A sentence can be ambiguous or context-dependent and can therefore express one or two or more statements—even statements that disagree in their being true or false. (Our fifth example below is a case in point.) However, where there is no danger of confusion we shall avoid ambiguity by suppressing the distinction. For example, we shall often use the term 'argument' to denote sequences of statements (as in our definition) as well as the sequences of sentences which express them.