

Deductive Validity

A valid deductive argument in which these conditions apply:

If the premises are true, the conclusion *must* be true.

The conclusion follow *necessarily* from the premises.

The premises provide logically *conclusive* grounds for the truth of the conclusion.

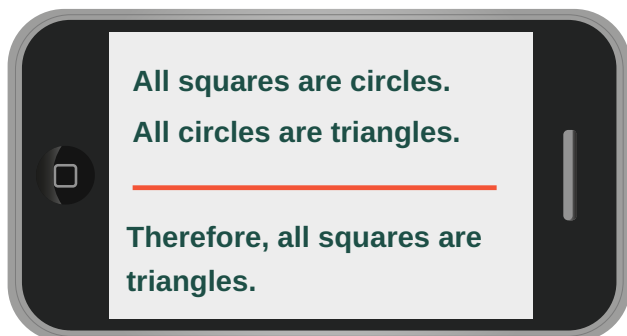
It is logically *inconsistent* to assert all premises as true and deny the conclusion.



In **everyday language**, valid often means "good" or "true." In **logic**, however, a valid argument must satisfy the above criteria.

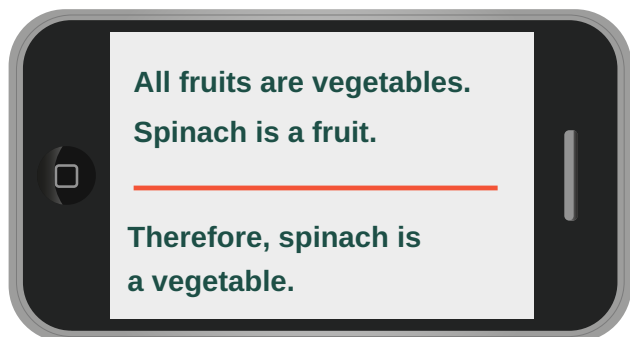


It is not necessary to know whether an argument's premises or conclusion are true to determine validity



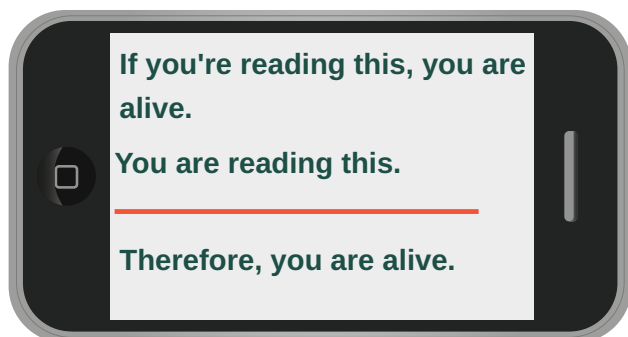
Valid!

- ✓ false premises!
- ✓ false conclusion!



Valid!

- ✓ false premises!
- ✓ true conclusion!



Valid!

- ✓ true premises!
- ✓ true conclusion!



No valid argument can have all true premises and a false conclusion!

A deductive argument in which the conclusion does not follow necessarily from the premises is said to be **invalid!**



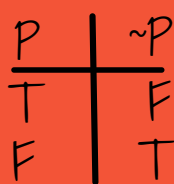
The key question in determining validity is if the argument's premises were true, would the conclusion also be true?



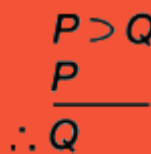
Many times, it is not possible to look at an argument and to judge validity properly without some help. Here are some helpful tools:



Venn Diagrams



Truth Tables



Common Patterns



Mood & Figure

SOURCE | Bassham et al. (2022) *Critical Thinking; A Student's Introduction*. McGraw.



Professor Stuke