Statement connective

Logical connective / Operator

A symbol or word connecting 2 statements

Next important concept is: Statement connective
Also known as Logical Connective
Also known as logical operator Like a function with arity 2

= A symbol or word that connects two or more statements.
The resulting expression is also a statement.

Thus, compound statements are two or more statements connected by logical connectives.

So, in the example given below:
R = All men are mortal AND all women are mortal

R is a compound statement.
R contains two simple statements, (i) All men are mortal and (ii) all women are mortal.
The two statements are connected with the logical/statement connective/operator: AND

Compound statement does not have to have ONLY two simple statement.

Z = EITHER all men are mortals AND all women are mortals OR all men are immortals AND all women are immortals.

Here putting the brackets is important.

Z = EITHER (all men are mortals AND all women are mortals) OR (all men are immortals AND all women are immortals).

Z = either (M and W) OR (Mi and Wi)

In simple terms, if one sentence contains two or more statements joined with logical connective, we call that one sentence 'a compound statement'.

2 types:
(1) Truth functional
(2) Non-truth functional

(1) Truth value depends entirely on the truth value of component statements

made up of simpler statements which each have a truth value

If you replace one simpler statement with another simpler statement with the same truth value, the truth value of the truth-func. compound statement does not change.

Q: London is capital of Uk
R: New Delhi is capital of India
S: Dhaka is the capital of Bangladesh

P = Q and R
P is true, if you replace either or both Q & R with another statement that is true

Pranesh Bhargava 10:47 AM
@POOSARLA DIVAKAR: "Is there any difference between statement and proposition
And what's difference between sentence and compund statement"

The terms statements and propositions are used interchangeabley.

Pranesh Bhargava 10:49 AM
Propositions are always single and simple statements.