Prenex form.

A sentence is in *prenex form* if all its quantifiers come at the very start. i.e., no quantifiers are within the scope of a truth-functional connective.

Prenexing rules.

Let P be a sentence in which the variable x does not occur. (If x occurs in P, but P is not in the scope of (Qx), then the sentence P' that results from replacing x throughout P with a different variable is equivalent to P.) Then the following pairs of sentences are interderivable.

(1)	$-(x)Fx$	$(\exists x) - Fx$
(2)	$-(\exists x)Fx$	$(x) - Fx$
(3)	$P \,\&\, (x)Fx$	$(x)(P \,\&\, Fx)$
(4)	$P \vee (x)Fx$	$(x)(P \vee Fx)$
(5)	$P \,\&\, (\exists x)Fx$	$(\exists x)(P \,\&\, Fx)$
(6)	$P \vee (\exists x)Fx$	$(\exists x)(P \vee Fx)$
(7)	$P \rightarrow (\exists x)Fx$	$(\exists x)(P \rightarrow Fx)$
(8)	$P \rightarrow (x)Fx$	$(x)(P \rightarrow Fx)$
(9)	$(\exists x)Fx \rightarrow P$	$(x)(Fx \rightarrow P)$
(10)	$(x)Fx \rightarrow P$	$(\exists x)(Fx \rightarrow P)$