Example 10　　　　　　　　　　　　　　　　　　　　　◀) **Self Tutor**

For p: the triangle is isosceles, and q: two angles of the triangle are equal, state $p \Rightarrow q$ and its converse $q \Rightarrow p$.

$p \Rightarrow q$:   If the triangle is isosceles, then two of its angles are equal.

$q \Rightarrow p$:   If two angles of the triangle are equal, then the triangle is isosceles.

Implication $p \Rightarrow q$	If Sam is in the library, then Sam is reading.
Converse $q \Rightarrow p$	If Sam is reading, then Sam is in the library.
Inverse $\neg p \Rightarrow \neg q$	If Sam is not in the library, then Sam is not reading.
Contrapositive $\neg q \Rightarrow \neg p$	If Sam is not reading, then Sam is not in the library.

logically equivalent

Example 11　　　　　　　　　　　　　　　　　　　　　◀) **Self Tutor**

Write down the contrapositive of: "All teachers drive blue cars".

This statement is the same as "if a person is a teacher, then he or she drives a blue car".

This has the form $p \Rightarrow q$ with p: A person is a teacher and q: A person drives a blue car.

The contrapositive $\neg q \Rightarrow \neg p$ is "If a person does not drive a blue car, then the person is not a teacher."