More Arguments

Given a set of premises and conclusions use valid argument forms to deduce the conclusion.

\[ p \rightarrow q \]
\[ q \rightarrow (r \land s) \]
\[ \sim r \lor (\sim t \lor u) \]
\[ p \land t \]
\[ \therefore u \]
ex.

\[ p \rightarrow (q \land r) \]
\[ r \rightarrow s \]
\[ \sim (q \lor s) \]
\[ \therefore \sim p \]
Do: Use valid argument forms to deduce the conclusion.

\[ \sim p \rightarrow r \land \sim s \]

\[ t \rightarrow s \]

\[ u \rightarrow \sim p \]

\[ \sim w \]

\[ u \lor w \]

\[ \therefore \sim t \lor w \]
a. If this house is next to a lake, then the treasure is not in the kitchen.
b. If the tree in the front yard is an elm, then the treasure is in the kitchen.
c. This house is next to a lake.
d. The tree in the front yard is an elm or the treasure is buried under the flagpole.
e. If the tree in the back yard is an oak, then the treasure is in the garage.
ex. Deduce the conclusion.

a. If the band could not play rock music or the refreshments were not delivered on time, then the New Year’s Eve part would have been canceled and Alicia would have been angry.
b. If the party were canceled then refunds would have to be made.
c. No refunds were made.
∴ The band could play rock music.
Do: Deduce the conclusion.

a. If I study or I am a genius, then I will pass the course.
b. I will not be allowed to take the next course.
c. If I pass the course, then I will be allowed to take the next course.
∴ I did not study.