

Conditional Translation Problem: WebCT Discussion

Problem: Use the **translation table** supplied below to translate the following English conditional into Chapter Four formal language.

P: It's warm

Q: It's sunny

R: We'll go to Chicago

1. If it's warm and sunny, then we'll go to Chicago.

Discussion: As usual we start the translation by picking out the **form** phrases. Here there are two: “**if... then**” and “**and**”. Setting these aside for the moment leaves the subject matter sentences “*It's warm*,” “*It's sunny*,” and “*We'll go to Chicago*”. We replace these subject matter sentences with sentence letters, following the translation table.

P

Q

R

1. If it's warm ~~and~~ sunny, ~~then~~ we'll go to Chicago.

That leaves only the form phrases “if... then” and “and” each competing to be the main connective. The comma marks the main break in the sentence, with “then” (part of “if... then”) resting next to the comma, at the main break. So “if... then” wins the competition, and acts here as the main connective. “If... then” is translated by the arrow.

1. If P and Q, then R
(P and Q \rightarrow R)

“And” connects together “P” and “Q” to form the whole antecedent “(P \wedge Q)”.

$$((P \wedge Q) \rightarrow R)$$

This completes the translation