

# Symbolizing in Sentential Logic

Unit 3

Identify the **Logical Connectives** by their common English **words** or **phrases**

Negation  $\sim$

Conditional  $\rightarrow$

And  $\wedge$

Or  $\vee$

Biconditional  $\leftrightarrow$

and their **Stylistic Variants**

Be careful with the conditional

Antecedent vs Consequent

Necessary and Sufficient

'Only'

# 4 Common Phrases

Neither... nor

Not Both

Exclusive or

Unless

Always look for the **main  
connective** and put it down first

Say the parts of the sentence  
to yourself **out loud**

Don't expect to get it **right**  
the **first time** every time

Learn to **read** your **logic** back to  
yourself in **English** and see if it matches up

# Numerical Quantities

None, Exactly, At Least, At Most

These are all a function of how we combine

$\wedge$  with  $\vee$

We can also use  $\sim$  to make things easier

# Translation

Going from **symbols** to **English**

Do **not** write things in **Logicese**

Use **idiomatic** English



Use **translation** when you **symbolize**

Make sure what you're **writing**  
is **actually** what the English **says**

**Practice!**

