

ACS Syntax and Semantics of Natural Language:
Assignment 1
Basic Categorical Grammar Derivations

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Hand-in of assignment: Bring to the Friday lecture of week 3. Include BRIEF notes on any difficulties or issues you had with specific derivations. It is more important to understand and be able to explain your reasoning than to get every derivation right. Be prepared to discuss the difficult cases during the lecture.

Task

Provide Categorical Grammar derivations for the 4 sentences below. Assign lexical categories to each word, and then use the appropriate combinatory rules — from forward and backward application, type-raising and composition — to combine the categories together. Follow the notation and conventions used in the lectures.

NOTE: at least one of these sentences is incorrectly parsed by the C&C tools demo.

5 marks will be awarded for each correct derivation.

Sentences

- (1) The man gave Raymond the book.
- (2) Raymond generously gave the expensive book to Mary.
- (3) Raymond pitied the man who John brutally kicked.
- (4) John gave Mary and provided Raymond with some books.