

# Semantic Theory 2025: Exercise 4

Due by: Wednesday, May 21 at 10:00 am (before class)

## Question 1

Give the truth conditions for the following sentences using Generalized Quantifier Theory: interpret each VP as a property (i.e. a set of entities) and interpret quantified noun phrases (underlined) as sets of properties. Illustrate your answer with a graphical depiction of a model in which the sentence is true.

- a. at least three cookies are in the jar
- b. few people clapped
- c. some, but not all, volcanoes are active
- d. every student except for Mark and Sally studied for the test

## Question 2

Determine the monotonicity properties (left and right) of the following determiners. Show how you derived these monotonicity properties.

- a. *half of the*
- b. *no more than six*
- c. *most*

## Question 3

Prove that the following statement holds:

The external negation of a right downward monotonic (monotone decreasing) quantifier is a right upward monotonic (monotone increasing) quantifier