

the basics of first-order logic (FOL)

a translation scheme

domain: people in Sunnydale

m : Mary

c : Carol

d : David

B : _____ ate a burrito

N : _____ took a nap

(1) Carol ate a burrito. _____

(2) David ate a burrito and Mary took a nap. _____

(3) If Carol ate a burrito, then David took a nap. _____

(4) Mary did not eat a burrito. _____

(5) If Mary did not take a nap, then David did not eat a burrito. _____

(6) Either it is not the case that Carol took a nap, or David ate a burrito. _____

(7) It is not the case that either Carol took a nap or David ate a burrito. _____

(8) Someone took a nap. _____

(9) Someone ate a burrito and David took a nap. _____

(10) Someone ate a burrito or took a nap. _____

(11) Someone did not take a nap. _____

(12) It is not the case that someone took a nap. _____

(13) Everyone took a nap and David ate a burrito. _____

(14) Everyone took a nap and ate a burrito. _____

(15) Someone did not eat a burrito. (Use the universal quantifier.) _____

(16) Everyone who ate a burrito took a nap. _____