

Assignment #4Informal Predicate Calculus

Exercises, pg. 69:

14. (c), (d)

17.

19. (b) **Hint:** You need to show that the *wf*, which is a conditional, is true in all interpretations. So you need to show that if v is any arbitrary valuation in any arbitrary interpretation I , then v satisfies the *wf*. (To do this, apply definition 3.20(iii) for satisfaction of a condition. Consider the two possible cases for the antecedent of the *wf*: (A) v satisfies $(\forall x)Fx$; (B) v doesn't satisfy $(\forall x)Fx$. Show that in both cases, v satisfies the full conditional *wf*. Case (B) will take a bit of work.)

20.