Philosophy 240: Symbolic Logic   Hamilton College
Fall 2011   Russell Marcus

Test #3 - Extra Credit

4.   1. (J ∨ K) ⊃ ~(L ∨ M)
          2. ~L ⊃ (~N ⊃ M)
          3. N ⊃ [(~O ∨ ~~O) ⊃ (J • O)]   / J ≡ N

Extra Credit (4 points maximum, so don't even try it if you haven't completed all the others):
          Provide a derivation of 4, above, using only the direct method of proof. No IP. No CP. I
think you need one more rule of inference to do it. Let's use this one: For any wff α, you may
introduce 'α ∨ ~α' into the proof as an axiom.

New Guidelines for October break
          Solution must be submitted before class on Monday, October 17.
          A complete solution is worth 3 points, maximum.
          Your grade on the exam will not exceed 100 in any case.
          You ***may not*** look over your notes or books or on the internet before working on the
                problem again.
          You may take as long as you wish to work on the problem as long as you **consult no
                more sources of any sort**.

Have a great little break!