Philosophy 240: Symbolic Logic
Fall 2010

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Homework Handout #3 - Practice Problems for Test #3

1. 1. G ⊃ H
   2. G ⊃ I / G ⊃ (H · I)

2. 1. J ≡ K
   2. ~K ≡ ~L / J ≡ L

3. 1. M / N ⊃ {O ⊃ {P ⊃ [(M · N) · (O · P)]}}

4. Prove that ' R ⊃ [(R ⊃ S) ⊃ S]' is a logical truth.

5. 1. D ⊃ E
   2. E ⊃ (F · G)
   3. ~F ∨ ~G / ~D

6. 1. (P ∨ Q) ∨ (~R ∨ S)
   2. ~Q · (~S · ~P) / ~R

7. Prove that 'A ∨ [(~A ∨ B) · (~A ∨ C)]' is a logical truth

8. 1. (A ∨ B) ⊃ ~(F • D)
   2. ~(A • ~D)
   3. ~F ⊃ ~(C • D)
   4. C ∨ A / A ≡ ~C

9. 1. (A • B) ⊃ C
   2. (F • D) ⊃ E
   3. A • D
   4. B ∨ F / C ∨ E

10. 1. ~F ⊃ (G • H)
    2. F ⊃ (I ∨ J)
    3. ~[G • (K • ~J)]
    4. K ≡ (L • ~J) / K ⊃ I