Worksheet Exercise 2.6.A.
Truth-tables for Equivalence

Name _____
Class _____ Date _____

Part A. Use complete truth tables to determine whether the following sentence pairs are equivalent. Be sure to label the columns as "sent 1," "sent 2," or "aux." Use the space on these two pages efficiently.

1. ~(~(~p)) , ~p
2. p ∨ ~q , ~p ∨ q
3. p ⊃ ~q , ~p ⊃ q
4. p ⊃ ~q , q ⊃ ~p
5. ~(p & q) , ~p & ~q
6. ~(p & q) , p ⊃ ~q
7. ~(p ∨ q) , ~p & ~q
8. p ∨ q , ~p ⊃ q
9. p ≡ q , ~p ≡ ~q
10. p ≡ q , (p ⊃ q) & (~p ⊃ q)
11. p ⊃ (q ∨ r) , (p ⊃ q) ∨ (p ⊃ r)
12. (p & q) ⊃ r , (p ⊃ r) & (q ⊃ r)
13. (p ∨ q) ⊃ r , (p ⊃ r) & (q ⊃ r)
14. p , (p & q & r) ∨ (p & ~q) ∨ (p & ~r)

Ex. 2. 6. A. Name _____ / _____