

LOGIC: CONDITIONALS & BICONDITIONALS [PIRNOT 3.3]

EX 3.3.1: Construct a truth table for the logic statement: $(P \wedge Q) \rightarrow \sim(\sim Q \vee P)$

EX 3.3.2: Construct a truth table for the logic statement: $\sim(P \rightarrow Q) \leftrightarrow \sim R$

EX 3.3.3: Given the statement "If cars are fast, then bicycles are slow":

- (a) Find the converse.
- (b) Find the inverse.
- (c) Find the contrapositive.

EX 3.3.4: Determine whether these two statements are logically equivalent or not:

"If hardback books are heavy, then softcover books are light", "If softcover books are light, then hardback books are heavy"