Section 1 – Logic
Supplemental: Using Excel for Truth Tables

• There are standard logic connectors that can be used in MS Excel
  
  \( = \text{AND}(p,q) \) 
  \( = \text{OR}(p,q) \) 
  \( = \text{NOT}(q) \) 

• Recall the \textit{Implies} connector is true except when \( T \Rightarrow F \).
  
  It can be used with the following statement: 
  \[ = \text{IF}(\text{AND}(p=\text{TRUE},q=\text{FALSE}),\text{FALSE},\text{TRUE})) \]

• Recall the \textit{If and Only If} connector is only true if \( p \) and \( q \) have the same truth value
  
  It can be used with the following statement: 
  \[ = \text{IF}(p=q,\text{TRUE},\text{FALSE}) \]

• See the Excel Sheet “TruthTables.xls” for details on how to type the formulas in correctly