1. [3 pts - 1 each] Identify the hypothesis of each conditional statement below, writing your answer as a complete, stand-alone sentence.
   (a) You can only go out to play if you eat your dinner first.
       \[ \text{If you eat dinner, then you can go out to play.} \]
   (b) It's necessary to be at least 16 to get a driver's license.
       \[ \text{(You) Get a driver's license.} \]
   (c) Just writing the hypothesis is sufficient to answer these questions.
       \[ \text{(You) Just write the hypothesis.} \]

2. [1.5 pts] Rewrite the biconditional statement below as a conjunction of two "if-then" statements: The product \( xy = 0 \) if and only if \( x = 0 \) or \( y = 0 \).
   \[ \text{If } xy = 0, \text{ then } x = 0 \text{ or } y = 0; \text{ and if } x = 0 \text{ or } y = 0, \text{ then } xy = 0. \]

3. [5.5 pts] Evaluate the truth value of each statement form below when \( p \) and \( q \) have values that make \( p \rightarrow q \) true but \( p \land q \) false. You may use our in-class/HW shorthand, but show each step (other than negations) separately.
   (a) \( \sim p \rightarrow \sim q \)
       \[ \begin{align*}
       T & \rightarrow F \\
       F & 
       \end{align*} \]
   (b) \( \sim (q \leftrightarrow p) \)
       \[ \begin{align*}
       \sim (T \leftrightarrow F) \\
       \sim F \\
       T 
       \end{align*} \]
   (c) \( p \lor q \rightarrow p \leftrightarrow p \)
       \[ \begin{align*}
       F \lor T & \rightarrow T \leftrightarrow T \\
       T & \rightarrow F \leftrightarrow T \\
       F & \leftrightarrow T \\
       F & 
       \end{align*} \]