Logical Equivalence

- Read pages 51 through 52 (section 2.8)
- Some key questions to answer:

  1. When do we say that two compound statements are logically equivalent? Provide examples.
  2. What is the relationship between logical equivalence of two statements and the biconditional of the two statements?
  3. What is the practical importance of logical equivalence between two statements?
  4. What is a statement logically equivalent to "$P \Rightarrow Q$"? What is the practical importance of this equivalence?
  5. If a statement P is logically equivalent to a statement Q, and that statement Q is logically equivalent to a statement R, does it follow that P is also logically equivalent to R?
  6. Is a statement logically equivalent to itself?

- Practice problems from section 2.8 (page 70): 2.51, 2.52, 2.53, 2.55